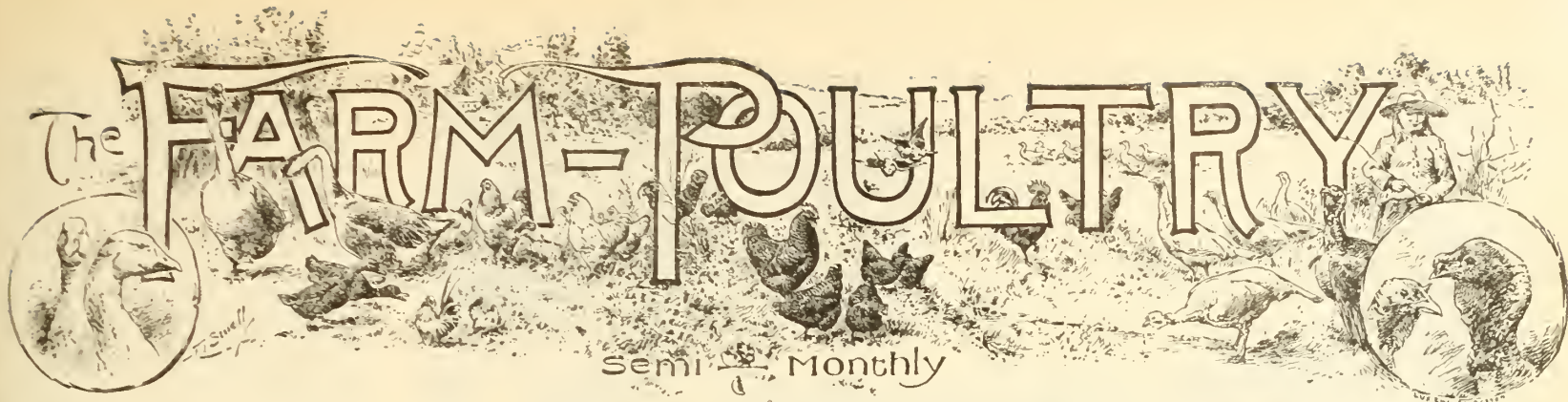


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VOL. 9.

BOSTON, MASS., JUNE 1, 1897.

No. 11.

Lessons From a Dear Experience.

"I am considerably indebted to you for your kind reply, privately, to my letter of some weeks ago," writes a correspondent to the writer.

"You may recollect that at the time of writing my letter I also ordered your latest book, 'Broilers for Profit,' which came to hand promptly. From it I learned one important cause for the death of my chicks, *overheat*. Ninety-five, ninety, and eighty-five degrees had been my temperature for the first three weeks. I dropped to 90°, 85° and 75° after reading your book, and had better success at once."

There is a point which needs special attention. Overheat is killing too many chicks in the brooders. Starting them at 100° is nursing them into a delicate condition. Chicks started at 90°, and the temperature gradually reduced as they grow older, will be more rugged, more active, more exempt from sickness, and will grow up into hardier stock. The hen hatches at a temperature of about 100° to 105°, according to her condition and the weather. That temperature falls fully ten degrees as soon as the hen leaves the nest to raise those chicks. We must imitate her as much as possible.

"Well, here I am at the old stand yet—the 'grindstone,' with my nose tight down on it. Over six hundred chicks, with brooders and hens—five machines; two hundred and fifty head of old stock,—and not a bit of help. You know better than I can tell you, that something is going behind. Old stock have nearly to take care of themselves, which they are doing by dying at the rate of six and seven a week. Roup—roup—roup—worse than in the depth of winter. From ten dozen eggs a day they have dropped to four and five. And yet my loss cannot see that I have much to do. From six in the morning until twelve at night; but I would not mind that so much if I could get results."

If everything went along well, the work enumerated would be about what one man could handle; but with the chicks and the incubators, and a lot of sick fowls, there is entirely too much to do. Those ropy fowls must be gotten rid of if success is to be obtained. All sick should be killed and buried deep. The houses should be disinfected, and preventives used to keep the now well ones from getting sick. There is really one man's work with the old stock, if he wants to get rid of that terrible disease; and the longer matters are delayed the more difficult will the labors be, and the more fatal the results.

"My machines have done somewhat better, but still very bad. Not once over a sixty per cent hatch, and they never will so long as my brooder fire is within four to twelve feet of them all. As you may remember, they are Homer City, very similar to Prairie State incubators. I have to fill both pans with moisture, and to put another one under each tray, or the shells just bake. I have tried many experiments, but I am meeting with the most success by keeping one machine hatching all the time, so that it is literally in a soaking condition.

"On Saturday last I had one hundred and seventy-nine eggs due, and they began to pip all over the trays, and got out splendidly, leaving the shells clean, and drying off nice and downy.

"Well, at about 11 P. M. I left (I have moved nearer my work since I wrote you last, and sleep at home) with my lamps all

right. On Sunday morning I came about seven o'clock, and, of course, went at once to the hatching machine. Can you imagine my feelings when I saw dead chicks all over the trays, in the shells and out, and the thermometer bang up to the top of the tube! On looking at the lamp, the flame had crept to about the height needed for first week of hatch. New barrel of oil, first trimming—same brand as always used, but totally different oil—as all my lamps have been doing this trick ever since. Three other machines were from 105 to 107 degrees.

"I took out eighty-three live chicks, but they are practically no good—ruined by the overheat."

That was certainly a sad experience. It is doubtful if half of those chicks taken from the machine will live, as the overheat has certainly ruined their vitality.

"Now to the chicks for the past two months. As I said earlier, I began to have better luck right away, helped no doubt by another change. Last year I had better success than ever before in raising, by giving no drink the first four weeks. Worked on that plan this year, but at last began giving all they wanted of milk or water. After about thirty gorging themselves to death the first day they all began to look much more natural, wings and tails stopped growing abnormally, and until this week I have not touched a wing or tail to 'dock' them.

"The past week they began (younger ones) dying from ten to twenty a day, and I stood and scratched, thought and worried, until I was almost ready for the asylum. I could see no reason beyond a damp spell of weather, but the house is dry now, so I do not blame that. I opened several that were ten to fourteen days old. The galls were as large as an ordinary hen's liver, a kind of orange color; everything else normal. What was it? I thought and thought, but could give no reason, as I fed grit in the soft food."

Right here we want to say that mixing the grit in the soft food is a most dangerous practice. Prof. Vale, of London, England, in writing about enteritis, says one cause is the addition of irritating substances to the fowl's food, such as the persistent use of cayenne in large quantities, crushed oyster shell, or grit. "I have had many cases for post-mortem examination," says Mr. Vale, "where the orifice of the gizzard leading into the bowel has been unduly dilated and the bowel inflamed, in consequence of grit, in its rough state, having passed into it. The grit or oyster shell being placed in the fowl's food, there is no means of knowing or of regulating the quantity taken by each bird. If more is taken than is required, it must be passed on through the alimentary canal, or it would cause death." What is true of fowls will hold equally true with chicks, and it may have been the real cause for much of the heavy loss. As for water for drink, we believe in giving it from the start. We have tried both methods, and see very little difference. Clipping off the tips of the wings and tails of such breeds as Leghorns, is a good idea, as it gives more strength to the bodies.

"Today, like a stroke from a club, the thought came to me, 'they have nothing to do.' And I believe I have thrown out hundreds of chicks this season that would now be fine broilers because I have not had sense enough to make them do as I do, work for a living—work hard. I always made my chicks scratch for their dry food before, and started this season, but from some dumbness

I had forgotten in spite of all to do this, and all they could do was eat and die from indigestion. Don't you think I need a good clubbing? I have said hundreds of times to myself that I was making a fool blunder somewhere, but I did not think I was as stupid as this.

"As soon as the thought occurred to me, I went to the barn and got some litter off the floor, and spread it about three pens, and threw some wheat and rolled oats over it. One or two chicks came from the hovers and began to look at it, presently to pick up a grain. A few more came out, and a straw would be shaken, and all over the pens they scooted. This went on for perhaps ten minutes. They saw no damage was done, so a few stood the enemy; presently a few more, with the result that in half an hour the floors were covered with chicks, scratching for dear life. In an hour you would not have known them for the same chicks. Where they were before droopy, sleepy, and generally tough looking, they were now heads up, wings in place, and though some would tumble over from weakness when they lifted a leg to scratch, they still tried to do their best. I did enjoy that half-hour watching them, although it put me very much behind in my work, and I do most sincerely hope that my serious troubles are over."

Not much commenting is needed on the close of this experience. Our correspondent certainly struck the keynote when he made those chicks exercise. We believe in making them hustle for all they are worth; for by good exercise the food digests better, and the appetite grows stronger. It will be well for those in trouble to carefully read and re-read these lessons taught by a dear experience.

M. K. B.

Wants a Good Brooder.

One of our exchanges, under the heading, "Incubator Chicks," describes several very common experiences with some of the brooders on the market, and then says:

"The world is hungry for a good brooder, and the one who can bring out a device that will avoid what we have described above can make a fortune at the business."

We are very glad to be able to inform our esteemed contemporary that there is such a brooder as he longs for, and that the readers of F.-P. have not been handicapped by the inefficient brooders which his readers seem to have been misled into using. F.-P. readers have long been familiar with the merits of the Peep-o'-Day brooder, which does the work a brooder is wanted to do. We are not unmindful of the fact that we are giving Mr. Hodgson a big "free ad.," but write this solely in the interest of truth, because we fully believe Mr. Hodgson has made the brooder which our contemporary says the world is hungry for. He has not "made his fortune" as yet; but the fact that his largely increasing business has compelled his making arrangements to build a new and larger factory, near the railroad, where he will secure better shipping facilities, indicates that he is prospering.

None Come Up To F.-P.

Enclosed find one dollar, for which kindly send me FARM-POULTRY for one year, beginning May 1st, 97.

I have tried several poultry papers since I gave up taking FARM-POULTRY a year ago, but none of them come up to your paper.

Maspeth, N. Y.

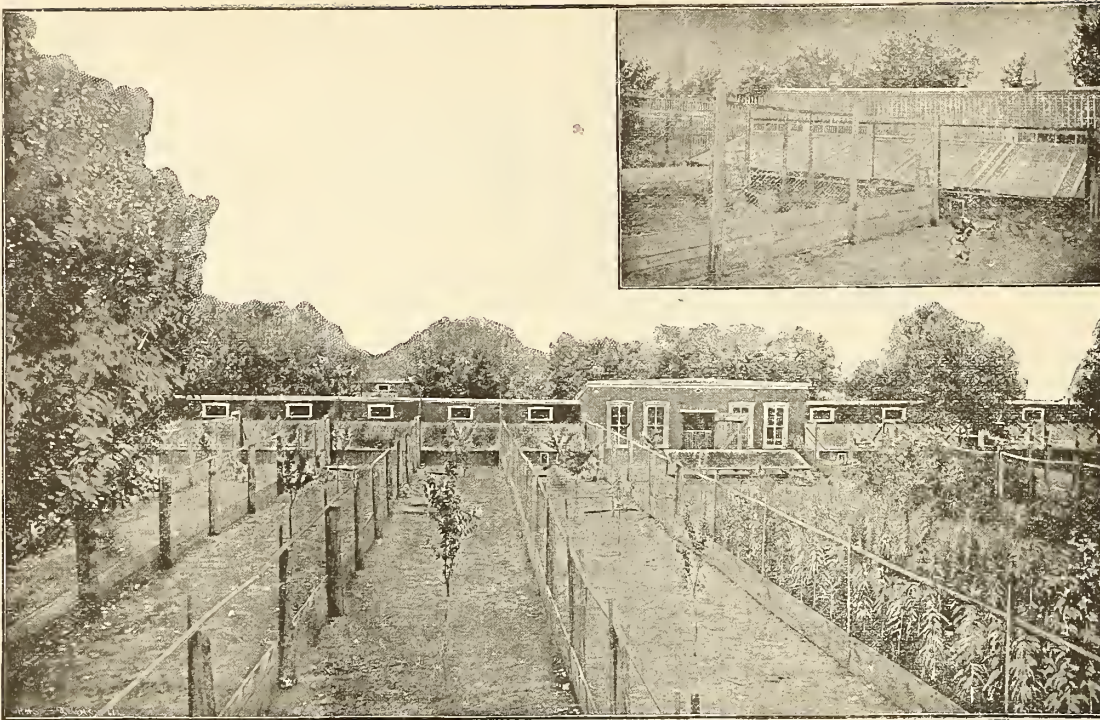
G. W. T.

Cross and Mongrel Breeding.

Mrs. S. C. Hall, a very popular and entertaining writer for the last generation, told a story of an old Irishwoman who occasionally made the round of the neighborhood and collected all the medicines left after the sick folks for whom they had been prepared were done with them. These she afterwards mixed up and used, under the conviction that what had been useful to so many other people must be beneficial to her, too. A look at some of the cattle in this country would indicate that they had been bred on the same principle. One otherwise very excellent man brought in from the east a lot of grade cows, in which Shorthorn and Ayrshire, with an occasional streak of Holstein, was the foundation blood. In a few years, by the use of Polled-Angus, Shorthorn and Hereford bulls, in quick succession, he had got together a stock highly suggestive of the Irishwoman's physic bottle. It is this kind of crossing that gives the capable breeder of pure bred strains of stock of all sorts the opportunity to get in his heaviest hits at cross-breeding. The man who can go into an ordinary herd of homebred cattle, or other stock, select females of a type adapted to his requirements and breed them to a pure bred male, with a reasonable share of potency, while likely at the same time to "nick in" favorably with the qualities of the dams, and also feeds and manages with reasonable care, has done about the best, both for himself and the country, that his means will admit. To raise pure bred stock worthy of registration means a good deal of money invested, a good deal of experience and skill if that investment is to be profitable, and a market in which the produce of his skill and care can be sold to advantage. Bad management of pedigreed stock will in a few years bring it to the level, sometimes even a lower level than good grade stock, and whenever pure bred stock is up for discussion, the owner is as much to be taken account of as the beast. It is mere waste of words to discuss breeding to a man whose stock are inferior in everything but the paper pedigree to those of his neighbor who never owned a pedigreed female in his life, but has good stock all the same, because he has a level head and clear insight into what he is about.

For this country, crossing, strictly so called, is scarcely within the province of the practical breeder. If his females are pure or very high grade, he cannot afford to take the chances involved in the introduction of a male of a different breed. The only common sense course is to select the males from the breeds likeliest to make a good blend of blood with his females, and follow steadily along that line. If there is any dairy breeder, for example, who has introduced for use on his Shorthorn, Ayrshire dairy cows a Jersey or Holstein bull, or both in close succession, he is simply breeding mongrels, with all the uncertainties that mongrel breeding entails, and the more rapidly his changes are introduced the more likely is he to get muddled. Grading up along a definite line may be taken as sound policy always. Zig-zag breeding is an absurdity, no matter where or by whom practiced, and it is that sort of thing that furnishes the most of the ridiculous results too often set down to the detriment of cross-breeding. What is as much to the point, is the experimental test which goes always to show that though the first cross may do a lot of good, the next cross is, as a rule, much less successful.—*Norwest Farmer*.

[The poultryman may find food for thought in that article.—Ed.]



RELIABLE POULTRY FARM, QUINCY, ILL.

A Visit to Quincy.

As my plans permitted but one day in Quincy, Ill., I was early afoot and making inquiries as to the locations of places I wished to visit. My first objective point was the office of the *Reliable Poultry Journal*. Mr. Curtis, I found, had not yet reached the office. The time of his arrival being somewhat uncertain, I asked to be directed to the Reliable Poultry Farm, and having secured the desired information, boarded an electric car, which shortly brought me to the outskirts of the city. Then a walk of ten minutes brought me to the farm, to find that Mr. C. had met and passed me on the way.

Mr. Walter Avis, his genial and gentlemanly manager, received me, and under his guidance I spent two profitable hours looking over the plant.

The Reliable Poultry Farm is beautifully situated just beyond the northeastern limit of the city of Quincy. The farm is seven acres in extent, and is devoted to poultry and fruit, though the fruit industry is subsidiary. In all sixteen breeds of fowl (including turkeys, ducks and guineas) are kept. It would perhaps be more correct to say now, "have been kept," for Mr. Avis told me it was their intention to reduce this number by about one-half, they having found, as have so many others, that there is more profit in handling a smaller number of varieties.

About eighteen hundred head of fowls, all told, went into winter quarters here last fall. At the time of my visit this number was much reduced. Mr. Avis reported sales as having been very good, and quite brisk still, though the selling season was well advanced. Notwithstanding heavy shipments of breeding stock, there was a large number of uncommonly good birds on hand.

To give a detailed description of the buildings would be tedious here, because while some characteristic features were noted, in the main they differed little from those found on any large poultry plant.

It struck me rather forcibly that a little different arrangement of the yards would have lightened the labor of caring for the fowls. In speaking of this later, Mr. Curtis stated that the plant as it is today was not the result of a deliberate plan, nor should it be looked on as complete; it has grown and still is growing. What might be called a house within a house was one of the special features which seemed to me worthy of a note. It was a device for preventing the freezing of the combs of Leghorns in extreme cold weather. The fowls roost in a very large box inside the hen house. Above the open front of this box is a heavy curtain ready to be dropped on a cold night and completely shut out the frost.

There are in all nearly one hundred yards,

in most of which fruit trees have been planted. The yards adjoining the duck pasture contained grape vines. When the grapes are ripening the fowls help themselves from one or two rows nearest the houses. Even these they rob sparingly, and with those beyond they rarely meddle at all.

Mr. Curtis, as is well known, is the enthusiastic advocate and agent of the movement to secure uniform conformity to standard requirements in standard bred fowls. It was therefore no surprise to me to find here special matings being made for the purpose of bringing certain breeds nearer to the standard requirements. I was shown two White P. Rock cockerels just received from a western breeder—one, a ninety-six point bird, was remarkably clear in plumage, a clear silvery white; the other, a larger, stronger bird, showed a great deal of yellow in plumage. This was in accordance with my utility theories; but what staggered them a little was that while the yellow bird had clear, golden shanks (as I would expect) the shanks of the white bird were of a richer, darker yellow, with a decided tinge of red in places, but no approach to flesh color.

Realizing that not enough importance has been given to shape of tail in Leghorns, the proprietor and manager of the Reliable Farm are this year making some sacrifices in other sections for the sake of breeding away from the common squirrel-tail.

Mr. Avis told me that they needed another White Leghorn male, and were finding it difficult to get what they wanted; they had been for some weeks in correspondence with different parties, but to that date without results.

I never realized before how rarely the

tendency to squirrel-tail is absent in a Leghorn. When visiting Leghorn breeders after leaving Quincy, I paid special attention to this point when examining birds. Mr. Avis had told me that what they required was a male of good size, clear color, with an abundant tail carried low down. Nowhere did I see such a bird, though I know many people think they have White Leghorns that would fill the bill. One breeder to whom I mentioned this subject was so sure that he had a bird of just that type that he closed his place of business (and he was busy) for an hour, and insisted on my going with him to his house to see the fowl—and lo, the bird was decidedly squirrel-tailed!

"I never saw him carry his tail that high before," said the gentleman in disgust, after trying in vain to make the fowl assume a more satisfactory pose.

Not all of Mr. Curtis' stock is kept at the home yards; some of it is farmed out. We visited several farms near by, and saw some remarkably good stock. I was sorry that it was impossible to see more of these isolated flocks, because some of the best birds were in them. There is prudence and there is policy in thus handling the best fowls; they are placed in the conditions most favorable for them, and they are invisible to the casual visitor and buyer. There are few breeders who have not found that sometimes their best stock mars a sale instead of helping to make one; people come to buy, and having seen the best, which is not for sale, are dissatisfied with the inferior stock, though well above the average in quality, and go away without buying at all.

The Pekin ducks were in two large pas-

tures—in one the breeding stock, in the other the sale stock. Ducks in the first lot were not for sale at any price until after the breeding season, as it is found that the disturbance in the flock caused by catching members of it, no matter how quietly it is done, or attempted, has a depressing effect on the egg yield. There were many fine individuals in both flocks, and the average quality was very high; but the cream of the duck stock was a pen of six birds in a little yard near the dwelling house. These ducks were simply out of sight. (This language is both literal and figurative). No eggs from this yard were to leave the farm this season. This, too, is as it should be. A poultryman has a perfect right to reserve stock for his own use. He cannot in justice to himself do otherwise. All his customers are entitled to is square dealing, the worth of their money, goods as represented.

As market poultry is not made a branch of the business here no special effort is made to hatch early chicks. In hatching both natural and artificial methods are employed. During the hatching season all hens which manifest a desire to do so are allowed to incubate. I saw a few hens brooding prize winners for the early shows, and there were in the cellar two Reliable incubators, one of them just due to hatch.

Mr. Avis told me that he was feeding corn heavily. He had intended to feed less corn as warmer weather came on, but as the hens were doing well had made no change.

Returning to the city, I visited the yards of Mr. E. L. Osborn, who breeds Wh. Wyandottes, W. P. Rocks, and Buff P. Rocks. Mr. Osborn is a young man just embarking in the business. Heretofore his operations have been confined to a city lot. A tract of eleven acres just outside the city had recently been purchased, and was being fitted for a poultry plant on an extensive scale. I had intended to visit other places in Quincy, but those of which I could learn were so widely scattered that, being slightly under the weather, I thought it unwise to attempt further visits.

Again I wended my way to the *Journal* office. Mr. Curtis was out, but returned in a few minutes. On introducing myself I was received with a cordial handshake. I counted myself fortunate in catching so busy a man as the editor of the *Reliable Poultry Journal* at an hour when he could take a little leisure. We talked for some time on matters, things, papers and people connected with the industry in which both are interested. On Mr. Curtis' invitation I visited with him the printing establishment, where the forthcoming issue of the *Reliable Poultry Journal* was on the presses, and also the Reliable incubator factory in which Mr. C. was interested until about a year ago, when finding that the paper required all his energies, he disposed of his stock in the incubator plant.

My interest in what I saw at the incubator factory was purely curious. I cheerfully own up to being so far behind the times that I prefer the natural incubator and brooder. Still the power of curiosity (in spite of my sex) was sufficiently strong to make the visit a pleasure. In the different departments of the works were machines and parts of machines at every stage of construction. Not many



DUCK PASTURE, RELIABLE POULTRY FARM, QUINCY, ILL.

completed machines were on hand; the orders come in too fast to permit of an accumulation of finished incubators and brooders.

I could not help thinking as we walked through the crowded rooms which the workmen were just leaving, of the country boy in the variety show who shamefacedly informed the audience, "I come to town today. I was a-comin' yesterday, but Ma's ole settin' hen tuk sick, an' I—an' I—I—I—had to set on the eggs."

That is just what in the modern division of labor each and every man connected with the manufacture of incubators is doing. Though the connection between cause and effect is less intimate than under the old regime, it none the less exists.

My train was to leave Quincy at 6.30 P. M. As I bade Mr. Curtis good-bye he said, "Now if it does happen that you miss the train come right out to my house and spend Sunday with me."

"Nothing would suit me better," I replied; "but I am pressed for time, and must be in G—tomorrow."

Man may propose; sometimes the disposals of the railroad managers, though they, according to the popular belief, have little expectation of a future residence, to say nothing of present high authority, in the celestial regions, sometimes sadly interfere with his plans. So it was now in my case. At the depot I learned that leaving Quincy for G—on Saturday evening, I would be stranded for twenty-four hours at a point half-way to my destination.

You may be sure that there was no delay in fulfilling the conditions of the promise made half an hour earlier. As night closed in I was again at the Reliable Poultry Farm, where I was most hospitably entertained by the proprietor and his estimable and efficient helpmate.

JOHN H. ROBINSON.

Much Ado About Nothing.

Not long ago an interviewer asked the secretary of agriculture this question: "What is the matter with the American hen?" The secretary replied:

"Nothing is the matter with the American hen; but something is wrong with the American farmer. He needs to be taught the usefulness of raising on his own land a great many things which we are obliged to purchase abroad for lack of domestic supply.

"Why did we import 1,000,000 dozens of eggs into the United States last year? Tell me that." The eye of the new secretary of agriculture, Mr. Wilson, twinkled as he asked the question, adding:

"Do you know that 132,000 dozen of those eggs came from China? Think of fetching that sort of produce all the way from the flowery kingdom, just to make sure of freshness! A few were brought from Japan; but the bulk of the imported eggs we ate last year, 800,000 dozen, were laid in Canada."

Compare these figures with those supplied by the secretary of the Boston Chamber of Commerce, printed in F. P., April 15th.

The whole United States imported one million dozen eggs last year!—one thirtieth as many eggs as the single state of Massachusetts bought from producers outside of her boundaries. Had Massachusetts bought the entire import of eggs she would still have purchased ninety-six and two-thirds per cent of her boughten eggs from American farmers; and under this supposition all other states and territories would have bought all their eggs from American farmers. The new secretary of agriculture evidently is not "onto his job" yet. It might assist him in finding his bearings if he would make an effort to find out just how long the enormous (?) imports from China would last the city of San Francisco. There may be a great deal that the average American farmer does not know, but an average farmer with average sense would never have been guilty of such a folly as was perpetrated in the department of agriculture when the recent bulletin on "Standard Varieties of Chickens" was issued; or that still greater folly (of which rumors reach us), of appointing as poultry expert (salary \$150 monthly) under the Bureau of Animal Industry, a man absolutely without reputation as an expert poultryman.

Poultry Book Keeping.

A correspondent residing in California, writes:

"I have never seen any articles in FARM-POULTRY on book keeping for poultrymen. Not simply plain records of eggs received, receipts and expenses as kept in the ordinary cheap poultry and egg records, but a complete system as kept by such men as A. C. Hawkins, James Forsyth, James Rankin, Knapp Bros., and others, showing losses, gains, interest, discount, stock account, and all the details; how books are closed up at the end of the year, statements made, etc. These firms have kept books of this kind for years, and must have poultry book keeping down fine. Now I would like to get their methods through FARM-POULTRY, and I have no doubt that there are others in the same boat. I have kept poultry accounts off and on for the past two years, but as a rule they have been unsatisfactory, and didn't show accurate results. So I came to the conclusion that there must be some accurate method, and I wish you would help me find one."

We doubt if there are two poultrymen who use the same method. We will reply by giving our plans:

In the first place, we use "Kuhn's Egg Record and Account Book," which we find very complete for laying and sitting hens. Besides the egg record, it gives a hatching record, expense account, eggs and birds sold.

In the annual summary we have the total number of fowls in each pen, number eggs laid by each, number eggs set, number chicks hatched, number of chicks raised. We have the total value of eggs sold, birds sold, eggs bought, birds bought, stock on hand beginning of year, stock on hand at end of year.

In the annual balance we have the value of all stock on hand beginning of year; interest at eight per cent on cost of land, yards, etc.; total cost of food, labor, etc.; value of all stock on hand at end of year; amount received for all eggs sold; amount received for all birds sold; amount received for all miscellaneous sold; total expenses; total credit; profits for the year.

In artificial incubation we use the system given in "Welch's Manual of Incubation," which gives the name of incubator; date of setting; number of eggs; kind of eggs; date of tests; infertile eggs rejected; number of chicks; number of deaths.

The author of Welch's Manual gives these hints, which we endorse:

"Every man who is making a business of raising poultry should be able to tell any day in the year how many fowls he has, how many eggs he is getting from each and every pen, how many chicks he has hatched, and the number of eggs required to hatch them. Also how many chicks or fowls he loses by death or otherwise. In short, a poultry raiser should know and have a record of each and every day's transaction for every pen of fowls on his ranch.

"To make this an easy matter, you should number each pen, and place therein a card with proper headings for the breeds and production of the same, and a monthly calendar also, and numbered to correspond with the pen. On this card make daily entries of the production of the pen. In this way no mistakes can be made, as everything is committed to paper, and the mind is relieved of all responsibility. At the end of the month take in the cards and replace with new ones. An excellent opportunity is now given for a perusal of the cards, and undoubtedly facts will be drawn from them which will be of great advantage to you in the further prosecution of the business."

Besides the use of above manual, in artificial incubation, we have cards hanging on each incubator, which impart these facts: Date of setting, date of testing, date for first moisture, date for all moisture, date when hatch is due.

We do not know of a more simple method of book keeping for poultrymen than is given in those two books. FARM-POULTRY will send the two for fifty cents.

M. K. B.

A Remedy for Soft Shelled Eggs.

G. C. M., Brooklyn, N. Y., writes: "I have succeeded in making an old Game hen that laid soft shelled eggs lay eggs with a good shell by mixing fine chalk with her food."

Poultry Houses for Women.

Written for FARM-POULTRY.

Now that the subject is being discussed, I am going to say a word about those dreadfully mannish large poultry houses; and I sincerely hope it will not be the last word, for the subject of housing is by far one of the most important factors of successful poultry raising. No doubt the biddies like them well enough, and I envy the strength that can care for them successfully; but there is not one woman in one thousand who possesses it, for I have tried it and know.

No matter how rich one may be, or how charitably inclined to give others less fortunate work, the time comes to us all, when, if you are at all particular, "you can do your work yourself." The idea of cleaning a poultry house twice a week and sweeping out the corners is enough to disgust any decent working man. Therefore let us be wise, my sisters, and when that time comes have something you can manage conveniently without too severe a tax upon your health and strength.

For five years I have summered and wintered my fowls in several small houses 4 x 6, in connection with other large ones 10 x 12, and my preference is decidedly in favor of the small houses. The men who clean them often speak of their being more handy to clean, also.

They are built in sections four and one-half feet in front and three feet in the rear, and put together with screws, set up eighteen inches from the ground. This suits my height best, but a taller person would like them higher, facing south, and closed in below on the north and east, thus making an open front scratching shed, connected on the west side with a boxed in run 20 x 6.

This leaves the door clear, so that one can open it and reach to the furthest corner without entering either house or run. It was my intention to cover these runs with oiled muslin in stormy weather, giving the hens free range in pleasant weather except during the hatching season. This, however, was a good idea that was never executed.

I find that hens can endure cold much better than dampness, and a floor well up from the ground and heavily dusted with hay chaff in winter is far better than one of earth, which I never yet succeeded in keeping free from dampness.

The chief advantage is the ease, quickness and completeness with which they can be cleaned, although the cheapness thereof is no small item. When light dusting such as hay chaff, sawdust, fine shaving or cut hay are used and renewed often, the work is not laborious or too disagreeable. For a woman who wishes to keep a few fowls and avoid the unpleasantness of soiled skirts, and a man not always dressed in every day clothes, the good points of these houses will be readily appreciated.

Now comes the question of the garden. Everyone is interested in that at this season, and what are you going to plant for the hens to have for green food next winter? I am going to plant tomatoes in mine, and plenty of them, too. These will yield a large quantity of fruit on a small space of ground; are easily gathered and cared for, and relished exceedingly by the fowls. They keep well when stewed, either ripe or green, late in the fall, barreled up, placed in a cold cellar, and then mixed with the morning mash in winter.

MISS E. A. ISHAM.

What the eastern producer wants to do this year is make more clear the distinction between absolutely fresh eggs and choice poultry and case eggs and cold storage goods. Experience is the best teacher, therefore let the public be taught to discriminate. It will pay big interest to any man who follows this suggestion.—*Maine Farmer*.

The White Wyandottes are today among the best hens possible for the farmer. We do not keep them, and therefore cannot be charged with high crime and misdemeanor in urging them upon readers. It seems as though the champions of this variety had concentrated efforts to establish heavy production, and succeeded to a remarkable degree. This breed is at the front of the line of march, and we trust may be held there for all time.—*Maine Farmer*.

Strong Hood's Sarsaparilla

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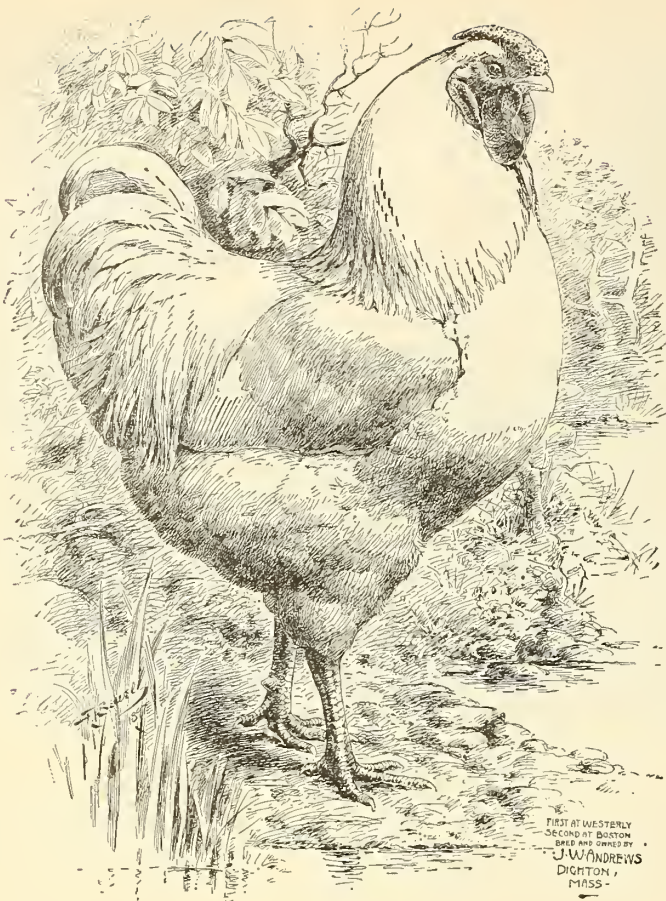
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Bred and Owned by J. W. Andrews, Dighton, Mass.

Pullets vs. Hens for Egg Production.

A Nut for the Editor to Crack.

I am not quite sure that you are right, Mr. Editor, when you advise those who produce eggs for market to kill off their hens before their second moult, after they have laid one season, and when they are about seventeen months old. While there is much that may be said in favor of the practice, it seems to me there are still more important reasons why this should not be done.

In the first place, who knows that a hen cannot, by the right feed and management, be made to lay as many eggs the second year as the first? Of course, she should be fed differently the second year to accomplish this—should receive less food of some kinds, especially grain, and more green stuff and animal food. She should also have more liberty or inducement to exercise. We know different breeds have different requirements. The quick maturing, "beefy" breeds, like Wyandottes and Plymouth Rocks, might not have as much business in them the second year as the more active breeds that also mature early, like Hamburgs and Leghorns, or the more inactive and slow maturing Cochins and Brahmas.

Another question is, when is a hen mature? Turkeys, although they breed when a year old, are not mature,—do not attain their full size and weight until three years of age. Geese are not mature or at their best until their third or fourth year—in fact, the older a goose the better. Wild geese do not mate until from two to five years of age, rarely before the third year. Even Pekin ducks are not thought suitable to raise breeding stock from until they are more than eighteen months old, while those two and a half years old are preferred.

Certainly no one should depend upon eggs of the first season for raising birds intended to perpetuate the most superior and vigorous stock. Most will admit, we think, that it is best to keep over the stock to be used for breeding, at least. Then again, when you have taken such pains to raise superior stock for egg production why should you offset their first cost with but one season's work? Is the cost of keeping a hen from July to Christmas so great and the difference between her first and second season's egg product of

so much value that both together more than equal the cost of raising a pullet to replace her? I have not made any experiments in this direction, and cannot present facts and figures. Can any one furnish such facts?

If I were to run an egg farm I certainly should not replace all my hens each season. I would kill off no more than one-half or one-third of them each year. Your plan may do for high pressure management where land is valuable, space limited, and money must be turned over often. It may give you a greater profit if you are not aiming for gilt-edge egg trade, but at the same time your risk is greater. Many prefer to take less risk, have less care and anxiety, and a more moderate and sure profit. They want to do away with the necessity for skilled labor if they go into it on a large scale. It is much easier to extend operations on the line of keeping hens for egg production than it is to increase the number of chickens raised. One can raise one hundred easier and with less risk than three hundred; one thousand easier than three thousand. The raising of the pullets is the most taxing and risky part of it to the man who undertakes the business, more than the keeping of a much larger number of hens through the year. If your place is adapted for the raising of only five hundred April and May hatched chickens each season, you may have two hundred and fifty laying pullets in the fall. If you kill off all your hens each season you are restricted to this number for egg production. Of course, you will not kill them off unless you have a nice lot of chicks coming along to replace them; but, are you sure that something may not happen to the latter before winter? Disease may strike them after the hens are killed. You take twice the risk that you do if you renew but one-half of your stock each year—and three times the risk than if you replace but one-third of your hens each year.

In one case you, where all are replaced, raise say five hundred chickens, kill in early summer two hundred and fifty young roosters for broilers, and two hundred and fifty hens, and have only two hundred and fifty pullets for winter laying. If you renew one-half you kill two hundred and fifty roosters and one hundred and twenty-five hens, and keep two hundred and fifty pullets and one hundred and twenty-five yearling hens. When you

replace but one-third each season, you kill two hundred and fifty roosters, eighty-three old hens, and have for egg production two hundred and fifty pullets, one hundred and sixty-six yearling hens, and eighty-three two year old hens. The same number of chicks are raised in either case, but by the latter plan you can keep five hundred head of your own raising, half of which are pullets, while but one-third of the whole number are what you can call old hens. Now perhaps you may give a knock down to the above arguments, and I hope we shall draw out many facts bearing on this question; but there is another consideration that is more important to my mind than everything previously stated, and I am sure that you cannot overthrow it.

Pullets lay smaller eggs than old hens. The prize winning eggs that won the premiums for size and weight at both the Boston shows were from old hens. Now, where small eggs sell for as much as large ones, if they are only fresh, this consideration does not count; but we all know that the finest product will bring the highest price in the right market.

You, Mr. Editor, I believe, sell your eggs at your door just as many of your farmer neighbors do. The local grocer takes them of you. Size may not be an important consideration with you when you market your eggs. If you want to get an extra price for your product you must furnish gilt-edged goods. This we all know. For such we get more than the market price.

Now let us go to some of the highest priced markets in Boston where the best of everything is sold. We find they have a carefully graded brand of brown eggs, of very large size, which they get of one man, for which they receive a very fancy price. We learn they are from a large egg farm in Rhode Island, and are the product of Light Brahmas and R. I. Reds. This party receives from some of his customers one price the year through for his eggs. He leads the market, not only because of the extra fine quality of his product, but because he also furnishes it regularly and in almost any quantity demanded. Now, let us get the opinion of this producer. How does he keep at the top and maintain his reputation for having the choicest product?

He keeps three thousand hens each winter. Towards spring it is no unusual thing for his men to collect fifteen hundred eggs from his hens in one day. Besides marketing his own product, he also buys more than he produces of his neighbors living within a radius of five miles of his place.

In a conversation with him last fall, he informed me that to make and keep the reputation of his eggs he took great care to have all eggs perfectly fresh, all being tested or lighted between July 1st and winter. No fish scrap or sea food, or anything that would hurt the flavor of the eggs, is fed. Eggs are never packed in musty packing, or allowed to remain in old egg cases longer than is absolutely necessary. They are also carefully graded into three classes: 1st—those of large size, good color (light brown) and uniform shape; white eggs are thrown out of this grade. 2d—same as above, except color is disregarded; this includes the large white eggs. 3d—small, discolored and inferior eggs. Speaking of size, he said: "We get larger eggs from two and three year old hens. They do not lay so many eggs, but they are larger and finer, and help the reputation of the producer. We appreciate the pullets for what they are and for what they are going to be, but old hens' eggs are most creditable. If we had nothing but pullets it would decidedly injure our trade. As it is, we have hard work to convince the consumer that there must be pullets' eggs."

SAMUEL CUSHMAN.

The Editor's Reply.

This is an old question, that has been discussed over and over again, and is one of the questions upon which "doctors disagree." In

LECTURES.

SAMUEL CUSHMAN,

Investigator, Lecturer and Writer,

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**SOME SUGGESTIVE FIGURES,
From the Books of Mr. Henry Sowden, Mansfield, Mass.**

	Dec., '96.			Jan., '97.			Feb., '97.			Totals.	
	No. hens.	Eggs laid.	Av. per hen.	No. hens.	Eggs laid.	Av. per hen.	No. hens.	Eggs laid.	Av. per hen.	Eggs for 3 months.	Av. per hen.
Pen 2. W. W. pullets.	20	274	14	20	336	17	26	388	18+	1,018	51
Pen 3. W. W. pullets.	25	285	11+	20	334	16+	16	317	19+	986	47
Pen 5. W. W. hens.	19	20	2	17	88	5+	17	103	6+	220	13
Pen 6. P. R. hens.	24	66	3	24	52	2+	24	18	1	136	6
Pen 7. P. R. pullets.	25	291	12	25	347	14	25	408	16+	1,046	42
Pen 8. P. R. pullets.	25	226	9	25	303	15	25	308	12+	897	36

every such question the point of view should be considered, and we would like it understood at the outset that we have always considered poultry from the profit standpoint. We are always riding that horse—that is the one end and aim of our existence, and is why we argue for selling off the hens at about seventeen months old, and restocking the houses with a new generation of well matured pullets; that is the key note to the best profit. We have given, again and again, comparative statistics of pens of hens and pens of pullets on our farm, proving conclusively that the pullets are the winter layers; and, as it is the winter eggs that pay the cream of the profit, obviously it is to the pullets we must look for that profit. If we can suppose that pullets will lay twelve dozen eggs each in a year, and year old hens nine dozen eggs each in a year, we still cannot credit the year old hens with three-fourths as profitable as the pullets, for this reason—a most all of the difference comes at the season of high prices. We have very little respect for the bird that works overtime when eggs are way down in price; we want the bird that works steadily and diligently when eggs are thirty to forty cents a dozen.

We have before us the table of the egg yield of several pens of pullets and hens on the farm of Mr. Henry Sowden, of Mansfield, Mass., and we quote it here in proof of our position, for several reasons. One is because it is not ours, and we prefer, whenever we can, to quote statistics from another farm rather than from our own. Another reason is that Mr. Sowden is an amateur poultryman, has been in the business but a couple of years, and his success is full of encouragement for other amateurs. We quote here the figures from six of the pens: Pens two and three, which contained White Wyandotte pullets; pen five, which contained White Wyandotte hens; pen six which contained Plymouth Rock hens; and pens seven and eight, which contained Plymouth Rock pullets—and we think those figures strongly sustain our case. Take, for example, pens two and five. Pen two, with twenty White Wyandotte pullets, gave 274 eggs in December, 336 eggs in January, 388 eggs in February—a total of 1,018, with an average of 50 1/2 to 20 eggs apiece for the three months. The White Wyandotte hens in pen five produced but 220 eggs in the same three months, which was 12 1/2 to 17 eggs apiece, less than one-fourth as many. The value of the eggs of pen two at an average of thirty cents per dozen, was \$29.61; that of pen five \$6.42. Which was it more profitable to keep, the pullets or fowls? Compare pens six and seven for another instance. Pen seven, with twenty-five P. Rock pullets, produced 1,046 eggs in the three months, which was 41 21-25 eggs for each of the twenty-five pullets. The value of those eggs, at thirty cents per dozen, was \$99.51. The twenty-four P. Rock hens in pen six laid but 136 eggs in the same three months, or 5 16-24 eggs apiece, of a value of \$3.97. To our mind, there is nothing like such comparative figures to give us a basis for argument upon such a question, and certainly from the standpoint of "poultry for profit," the hens are not in it compared with pullets. It is true Mr. Cushman draws a comparison between what he calls the quick maturing, "beefy" breeds, like White Wyandottes and Plymouth Rocks, and the quicker maturing Hamburgs and Leghorns, or slower maturing Cochins and Brahmas; and we ought to say, here, that we have discarded from our farm both the quicker and slower maturing breeds, and use only the "beefy" Wyandottes and Plymouth Rocks, for the very reason that those "beefy" breeds pay us much the better profit; their "beefiness" is a factor of value, and the money part of poultry sent to market ought to be considered, as well as the eggs.

It is very unfortunate that no careful experi-

ments have been made upon any of the questions raised in Mr. Cushman's letter. He asks, "Who knows that a hen cannot, by the right feed and management, be made to lay as many eggs the second year as the first?" Then he says that "The quick maturing, 'beefy' Wyandottes and Plymouth Rocks might not do as well the second year as the quicker maturing Hamburgs and Leghorns, or the more sluggish Cochins and Brahmas." Special notice ought to be paid to that right food and management. He knows what the right food and management of year old hens is, and if, as he suggests, they should receive less grain food and more green stuff and animal food, how many poultrymen have the brains and the executive ability to carry out this right feed and management? Nay, how many poultrymen separate their old hens from their pullets, any way? A few do, we are willing to admit, but the proportion in one hundred is surprisingly small. How much wider our knowledge upon this subject would be if one of the experiment stations would take up this question and carry two or three flocks of birds through until they died of old age, noting carefully food conditions, etc., and the egg product; also the hatchability of the eggs, and the virility and vigor of the offspring; but no experiment station seems to have the "sand" to undertake such a promising experiment. Mr. Cushman asks, "When is a hen mature?" and then goes on to say that turkeys do not attain their full size and age until three years of age. We cannot see that the turkey and geese quotations have any bearing upon the subject. For our own part, we believe that our common varieties of poultry are fully mature at ten to twelve months old; that is, have attained *their full stature and full size*, excepting as they take on additional fat, which adds a trifle to the weight, but, generally speaking, subtracts from the vigor and virility; therefore, we believe that fowls are at their best at ten to thirteen months old.

Mr. Cushman says, "Certainly, no one should depend upon eggs of the first season for raising birds intended to perpetuate the most superior and vigorous stock." How does he know that? Has he or any one else carefully tested and compared the merits of stock hatched from pullets' eggs, (or eggs of the first season), with that of stock hatched from eggs of the second or third season? We believe that prejudice in favor of hens' eggs for hatching is based upon "theory" only. One man got the idea into his head that the larger hens' eggs hatched larger, stronger and more vigorous chicks, and told some one else so. The "some one else" accepted it as truth, and helped it on its way, and the theory obtained a foothold. No one knows, and until we can have this question accurately tested, the man who believes to the contrary has an equally good right to his opinion.

Mr. Cushman says, "Then again, when you have taken such pains to raise superior stock for egg production, why should you offset their first cost with but one season's work?" He overlooks the fact that we believe in progress, and that the offspring of this superior stock should be still more superior. We do not believe in deterioration, and we want to make each year's stock better laying and of higher average excellence than that of the season before. That is one advantage of reproducing the laying breeding stock every year, and breeding from selected specimens only—that you get a step ahead every year, and if you continue to breed from the old stock you stand still.

Mr. Cushman makes much of the fact that pullets lay smaller eggs than old hens, and says, "The eggs that won the premiums for size and weight at both the Boston shows were from old hens." Of course they would be, because old hens lay larger eggs, and premiums for size and weight are, of course, premiums

offered for hens' eggs. In nine hundred and ninety-nine markets out of a thousand the medium size eggs sell for as much as the very large ones. In other words, size is not considered at all. Extremely small ones, of course, do not command the "going" price.

We cannot see that Mr. Cushman makes a point in quoting the producer who sells carefully graded, large brown eggs to one large dealer for a fancy price, because he leaves wholly out of the question the cost of those large brown eggs. To return to our first illustration,—if a year old hen will produce nine dozen of eggs, and a pullet in her first year of laying maturity will produce twelve dozen, obviously, the hen's eggs should fetch a premium of twenty-five per cent above the pullet's eggs in order to balance the account. Mr. Cushman knows very well that no eggs do that. A premium of about five cents per dozen is paid for those eggs, but as the eggs cost fully ten cents per dozen more than pullets' eggs, obviously, the producer of those fancy eggs is not making as much on them as he would make on a twenty-five per cent greater product at the slightly lesser price. It takes not a great deal of mathematical ability to explain that out! The producer whom Mr. Cushman quotes says, "We get larger eggs from two and three year old hens. They do not lay so many eggs, but they are larger and finer, and help the reputation of the producer." That is all right; we see nothing new or very striking in it. The point we make is that they do not help the reputation of the producer sufficiently, (nor swell the price sufficiently), to make up the greater cost. We used this very argument in a conversation with a large dealer in Boston, who sells thousands of eggs each week to the best Back Bay trade, and who thought he was doing a grand thing in paying Brahma and Cochins breeders five cents a dozen above market price for their Brahma and Cochins eggs. We did a little figuring with him, and he was completely nonplussed when we showed him that those Brahma and Cochins eggs were costing the growers of them fully ten cents per dozen more than other eggs would cost, and yet he was only paying five cents premium on them. We could not see where the producer was benefited by that arrangement!

We are not at all sorry to have this question come up once more. We will be glad indeed of light upon it, but feel bound to admit that in our experience, observation and study of the question we have found *no evidence* that a year old or two year old hen would be anywhere near as profitable as a pullet in the first year of her laying maturity. Nor is there one scintilla of evidence that the chickens hatched from a hen's eggs are stronger and more vigorous, or produce "superior" stock, to the chickens from the eggs of a fully matured pullet. We believe in progress, and we want all the light we can get upon this and many other unsolved problems; but we submit that "theory" is not evidence, and until we have some evidence that year old and two year old hens will pay anywhere near as good a profit, or that their eggs will produce stronger and more vigorous and "superior" stock, we shall continue to breed largely from early hatched and well matured pullets; and firmly believe that we are furthering our own best interests and improving our stock by so doing. A. F. HUNTER.



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What Constitutes a Good Brooder.

Today there are plenty of people scoring themselves as ignoramuses and failures because they have not yet been able to successfully raise brooder chicks. Sometimes their rating is just, sometimes it is rankly unjust to themselves; because it is quite possible that the brooder and not the operator, is the source of failure. Or the difficulty may lie even further back, i. e., with the hatching machine. Chicks poorly incubated, chilled or overheated and brought out weak and sickly, are too much of a handicap. Even an expert could not raise them. Unfortunately, it is only the expert who knows too much to bother with them; even as it is only the expert who is not sure to have them to bother with.

Granting that the chicks are strong and well hatched, it needs a level head, one that can balance very fairly the claims of rival manufacturers, one that can see in advance the necessary points of a good machine, to select a brooder that will do good work. Nowhere is time better spent, or money more surely saved, than in this study—and it is because one may study both failures and successes, (the failures and successes of the other fellow), in them, that poultry papers lend such valuable aid. Nowhere else can this aid be had, unless one has friends in the work. Nowhere else can one get the freshness of ever-recurring experiences.

Perhaps the first requirement of a good brooder is that it shall be of sufficient size. Though the manufacturer names the number of chicks it may hold, responsibility for crowding falls finally on the user, who determines the number of chicks actually brooded therein. Almost any brooder will hold its "catalogue number" of newly hatched chicks—while ten days later, one-half that number will be all (possibly more than) it ought to carry; but the operator may always have this consolation—if he overcrowd, the chicks will die off to the requisite number, and then he will have room enough. After sufficient size, about the first thing I should stipulate for would be a chance to move away from the heat. If, as is often said, the chicks are their own thermometer, they form one so variable that no man can fathom it. Outside changes in temperature may run the thermometer far up or down unexpectedly during the night; this is well known. It is not often noticed that the chicks want a higher temperature during cold spells; whereas, they are quite sure to get a lower temperature unless the operator be unusually watchful and judicious. A temperature of 90° will often drive a three weeks old chick outside for air, if the weather be warm; while, if it be cool outside, he will snugg contentedly under the cover, chattering to his mates of the delights of a temperature of 90°. It is this, together with the ill effects of cold, which makes me like to be very sure that the brooder shall be warm enough, while insisting that the chicks shall have a chance to move out when necessary. By "out," I do not mean from under shelter, but from the hover to the main portion of the brooder, which I think should always be enclosed if for use out of doors.

This brings us to another point, namely, the fact that such enclosure is also necessary as a shelter from storm, if the brooder be, literally, an "out door" brooder, located neither in a building nor under a shed. Some makes are offered with a sort of drop shelter board at the front, to be bought or not, at the buyer's option. It is the poorest of poor economy to try to get along without this shelter board.

Adequate provision for diffusion of air under the hover is a point where some of the highest priced brooders fail. Before May there is much air stirring always, and this fault is not so fatal; but if one uses a brooder in May and early June, there must needs be some provision for extra fresh air beyond that which is needed during the early months. The advancing heat of the season acts detrimentally in two ways: first, the brooder is likely to get very hot and close, even with the best of care; but far worse than this, though much less often noted, the lamps must be run so low that they give off ill odors constantly, and these, in spite of all assertions to the contrary, do affect the air in the brooder. It is

far better to have more air under the hover, and then to run the lamp higher. This may seem to mean greater expense, but it really means greater economy, for the extra cost of oil is far more than balanced by the saving in chicks.

All but the merest greenhorns know in these advanced days that there should be no corners in brooders; but many still have them, and a simple device may dispense with them at the cost of a very little room. A thick slip of pasteboard, of a width equal to the height of the hover, being tacked on edge in a slightly curved position across a corner, effectually disposes of the latter. One must see, too, that there are no traps in and around the brooder to catch the chicks, and no raveled fringes to choke them.

Given a thoroughly good brooder, and there are still left difficulties that lie with the operator. There are many good formulas for feeding. With a well proportioned food formula, the difficulties narrow down mainly to three, namely, crowding; lack of the absolutely essential grit, charcoal and green stuff; failure to separate and grade according to eating capacity and strength. At two or three weeks of age, I look upon this grading as a necessity. It will "kill two birds with one stone," too, while saving many; for, although it is not universally true, it is generally the case, that a division into two lots of stronger and weaker divides the cockerels from the pullets. If among the weaker lot are found some whose weakness is constitutional, or due to slow eating, they should surely be disposed of during the season, for they are the material out of which future deadheads are made.

A word about so-called toy incubators and brooders. I by no means wish to go on record as against them. Properly constructed, they fill a long felt want. Small hatches and brooders of almost every capacity were wanted long before they were supplied. They can be made practical and satisfactory. They are made, some of them, so as to be absolutely worthless. Last year I handled one of these small brooders, and found it to be what Mr. Page, in the January number of FARM-POULTRY calls "a slaughter pen." It was absolutely lacking in every point which I have mentioned as necessary to a good brooder. Besides this, it was so illy proportioned to the size of the lamp that it was impossible to keep the temperature below 100°, even with it running as low as it was possible to keep it alight, and giving off a constant vile odor. The bottom heat, too, was altogether too strong to suit my ideas as to what was requisite. A very little head work, however, with the assistance of a boring bit and two boxes, transformed it into a very practical brooder. With the aid of one box, the lamp compartment was made larger and deeper. The other took the place of the framework of the brooder proper. Its heavy bottom, together with the enlargement of the lamp compartment, brought the bottom heat down to a reasonable point. Its floor area being larger than that of the lamp compartment, gave some slight opportunity for the chicks to move into cooler quarters if desiring to do so, while its enlarged capacity lessened both the crowding and the excessive heat. As the "scientific" portion of the purchased brooder was still used, perhaps the whole might be regarded as merely an "improvement" thereon.

Cranford, N. J. MYRA V. NORRIS.

From the Golden Gate.

A subscriber in Oakland, Calif., writes as follows: "I shall be glad if you can answer the following questions for me. Their seriousness to us is my reason for thus troubling you. Your answers in FARM-POULTRY give us confidence in your advice."

"We have established a poultry ranch on the first of the foothills back of Oakland. We have eleven hundred fowls, Brown Leghorns, Buff Leghorns, Minorcas and Houdans, and crosses from these breeds."

"The houses are 6 x 10 ft. inside, 7 ft. high in front, and 4 ft. high in rear, with shed 6 x 6 ft.; and each yard is 25 x 125 ft. In each house we have thirty-five hens. The houses are cleaned once or twice weekly, and kept dosed with lime sweepings and straw. The feed—6 to 7 A. M., soft feed composed of ground barley two-thirds, and bran one-third, soaked over night, with cold water in summer, and hot in

winter, except on Wednesdays and Sundays, when they get cocoanut and middlings (scalded). For each pen of thirty-five hens we feed near two gallons of these mixtures (pretty dry). With the soft feed we feed cut plucks, sometimes raw, sometimes cooked. During the day we feed a large amount of cabbage and cut clover or other grasses. Shell and gravel are always kept in the yard."

"Evening feed consists of grain, principally wheat, except in winter, when we feed wheat and corn alternately, about four lbs. of grain for each thirty-five hens. The yards are frequently ploughed and harrowed, and barley thrown in for scratching."

"We have suffered very heavy losses with diarrhoea; and many deaths have occurred which we cannot account for. Fowls are still dying at the rate of about one daily."

"Can you tell me in what we are feeding wrongly? One of the hens has been laying eggs with more or less blood in the whites. What is the cause of this? We have some hens which lose the use of their legs, but otherwise are all right, and sometimes keep on laying."

"We feel we are not doing quite the right thing (somewhere) and shall be glad if any advice you can give us in your next issue."

[Overcrowding and overfeeding are the causes of the trouble here. Thirty-five hens are more than three times too many for a house 6 x 10 ft. It is a well known law of physics that two bodies cannot occupy the same space at the same time. When we tell people that two or three hens cannot be kept in the space barely sufficient for one, and kept in healthy condition and good laying order, they assent to our proposition. So far so good; but they don't and won't practice what we preach. They keep right on trying to handle fowls in crowded quarters, regardless of the fact that over and over again it has been conclusively demonstrated that overcrowding will not work.]

If our correspondent, having first reduced the number of hens in each pen, will reverse the rations of barley meal and bran in the morning feed, and will use two or three times a week corn meal instead of the barley meal; if instead of merely wetting the mash he will scald or cook it; and will feed no more of mash and whole grain than the fowls will eat up quickly and greedily, he will soon find no cause to complain of sickness among his fowls.

After the hens have commenced laying we would advise to gradually change the proportions of meal and bran in the morning feed until the composition is about half-and-half. Then don't feed more than the fowls will clean up in, say, three minutes. With Leghorns some poultrymen find it advisable when the hens are laying heavily to keep dry bran mixed with about one-fourth meal where the hens can have access to it at all times. The hens will not overeat of the dry bran, and yet there is no danger of their being underfed—not having sufficient material to keep the egg machine going.—ED.]

"Sanitas"

is an absolutely non-poisonous disinfectant, and is necessary to produce healthy birds. "Sanitas" disinfecting powder should be freely sprinkled in the yards and used as a whitewash. It destroys lice and prevents disease.

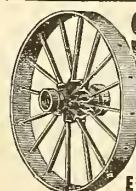
"How to Disinfect," a book sent free to all poultrymen.

The American & Continental "Sanitas" Co. Ltd.
636 to 642 West 55th St., New York City.

You have heard of

Buffington and His Buffs.

He has reduced the price of eggs, and will sell from the following varieties.
Buff Wyandottes, Buff and Barred P. Rocks, Buff and White Leghorns, Buff and Black Cochins, Rhode Island Reds and White Wonders \$1.25 for 15; \$3 for 40.
ROWLAND G. BUFFINGTON,
Box 677, Fall River, Mass.



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Staggered Oval Spokes.

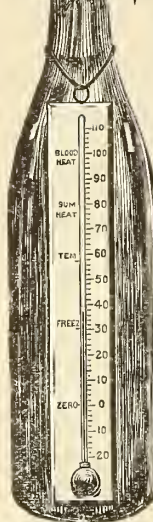
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CHEAPEST AND BEST

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A COOL BOTTLE



of Hires Rootbeer on a sweltering hot day is highly essential to comfort and health. It cools the blood, reduces your temperature, tones the stomach.

HIRES Rootbeer

should be in every home, in every office, in every workshop. A temperance drink, more healthful than ice water, more delightful and satisfying than any other beverage produced.

Made only by the Charles E. Hires Co., Philadelphia. A package makes 5 gallons. Sold everywhere.

ELBRIDGE C. COMEY,

Originator and Breeder
of the celebrated

"DUKE OF YORK" Light Brahmas

UNEQUALLED for their great SIZE, grand SHAPE, superb COLOR, fine COMB, profuse MIDDLE TOE FEATHERING, and superior LAYING QUALITIES.

The "DUKE OF YORK" LIGHT BRAHMAS, are the result of careful study in mating for FINEST POINTS, without detriment to UTILITY. They have been bred continuously since 1862, regardless of LABOR or EXPENSE, upon FARMS, allowing free range, and are a VIGOROUS, PROLIFIC strain, possessing PERFECT BRAHMA CHARACTER, according to the "STANDARD OF PERFECTION."

They have WON a large number of the HIGHEST PRIZES YEARLY at the PROMINENT EXHIBITIONS in UNITED STATES and CANADA, in the hands of my customers.

FIRST-CLASS Birds for sale at reasonable prices. SPECIAL RATES made those wanting large numbers. PARTICULAR ATTENTION given to mating for best results in breeding, according to POINTS and PEDIGREE.

EGGS From SELECTED MATINGS of EXHIBITION BIRDS, at \$3.00 per sitting of 13 Eggs; \$5.00 for 2 sittings; \$7.00 for 3 sittings; \$10.00 for 5 sittings, carefully packed and delivered to Express in BOSTON.

NO CIRCULARS. WRITE FOR WANTS.

20 Granite St., SOMERVILLE, Mass.

FRESH CUT BONE

MEAT FOR POULTRY,

Also Beef Scraps, O. K. Animal Food, Oyster Shells, Fish Meal, Granulated Bone, Steamed Meat, Grit, etc.

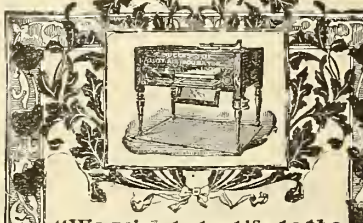
BARTLETT & HOLMES, Springfield, Mass.

C. A. BARTLETT, . . . Worcester, Mass.

Send for catalogue.

SEA SHELLS best grade fine ground for poultry feed. Best and cheapest shells known \$1.25 bbl.—5 bbl. at \$1.00. Discount in quantity. Samples, 2 cents.

F. P. KNOWLES, Guilford, Conn.



"We wish to testify to the good qualities of the

NEW

Successful Incubator.

"We were hatched by it, and know whereof we speak."

"We didn't die in the shell for lack of moisture, because this machine generates its own moisture." Other new features fully explained in catalogue. Sent for 6 cents in stamps.

DES MOINES INCUBATOR CO.
Box 14, DES MOINES, IA.

Elementary Poultry Science.

Said a friend to me one day, "I've learned one thing, at least, from my experience this season: it won't do to feed any wheat to young chickens. I killed more than fifty of mine by feeding wheat."

"You may have fed wheat, and also lost chicks," was my reply; "yet the wheat did not kill the chicks. I hatch more than ten to your one, and you lose more than ten to my one, though my chicks are fed wheat daily from the time they leave the nest."

This man would be classed above the average in intelligence. He had for a number of years successfully conducted a business of some magnitude, and still he was incapable of making original investigations; i. e., observing and reasoning for himself, deducing theories from his observations, and testing his theories by experiments. This is where so many poultrymen are at fault. Few of us are persistent in the search for causes. Having settled in our minds that this or that thing may have produced a certain result, we let the matter rest there, making no attempt to prove that the cause we have *guessed* is what logicians call the *efficient* cause—the cause without which the result would not have been brought about.

Much of what passes now-a-days for science in poultry culture has the form of science without the substance. Of much more it might truthfully be said that while it has the name, it lacks both the form and the substance.

As I write I have in mind a bulletin once issued from the agricultural experiment station of one of our state universities. It purported to give the results of an experiment made to determine the relative value as egg producers of some of our most popular breeds of fowl. The number of representatives of each breed in this experiment varied considerably. Of some kinds there was but a single hen; of others there were ten or twelve, or more. The largest egg yield reported would have been a disgrace to any amateur; the lowest was a disgrace to the man who conducted the experiment; yet the state paid for the printing of a bulletin, editors who should have known better republished it, and thousands, no doubt, accepted its conclusions as authoritative, if not as final.

Look at some of the tables of the results of chemical analyses of foods and at the scientific ratings (so called) based on these tables. Look at the descriptions of diseases and of pests—so filled with technical terms and phrases that none but specialists can read them at all. What wonder that many have turned from such stuff in disgust, saying that if this was science they would have none of it!

This stuff is not science. Such methods are not scientific. An experiment to determine the relative values of the different breeds cannot be called complete if only continued through a single season. Analyses of food are useful—so are studies of diseases; but it will require many series of experiments to settle the question of egg production (conceding that it can be settled; the chemical analysis of an article of food does not always show its feeding value; and there is no more sense in investigating diseases and making the results inaccessible to those for whose benefit the work is supposed to be done than there is in doing useless work of any other kind.

We need to be more alive to the importance of accurate knowledge. We need to be filled with the scientific spirit. I hope no one who does not know what the scientific spirit is will be moved to exclaim that practical people do not need it. Those who would be practical need this spirit most. If they have it not, they should at once set about acquiring it.

What I call the scientific spirit closely resembles at many points what is generally known as common sense. Do not misunderstand me as saying that they are the same thing, for they are not, though they have many points in common.

Common sense is defined as inborn clearness of mental vision, prudence, sagaciousness, as distinguished from a combination of the same qualities resulting from acquired habits or training. We may put it also in another way: Educated persons, whether possessed of native common sense or not, reason more correctly, their judgments are more accurate, their opinions more valuable than they would be if these persons lacked education. On the

other hand, it is a well known and remarkable fact that there are certain persons who, never having had educational advantages, compete on more than equal terms with the average of educated men in every walk in life where education is not the essential thing. The success of these men is attributable to the possession in an extraordinary degree of common sense, and the men who add to native common sense an insatiable inquisitiveness are those to whom the world is indebted for its progress in knowledge.

Another characteristic of the scientific spirit is the disposition to reject doctrines and dogmas, old and new, unless accompanied by satisfactory proofs; with this disposition there should be ever present a willingness to examine without prejudice all aspects of every question. A scientific mind is cautious, critical and skeptical; it demands reasons, demonstrations, proofs.

It needs no more than common sense to show us how much of what passes for knowledge in poultrydom is mere conjecture, hypothesis, theory. One man has a theory that cross-bred fowls are better for the farmer than thorough-breds. He has made many observations, conducted some experiments, and the results, as he sees them, tend to confirm his theory. How rarely does it happen that such a man in giving his views tells us that his conclusions are subject to revision? Does not the investigator as a rule come out flat-footed and say, "Cross-breds are better for farmers than thorough-breds; I have observed, I have experimented, I know?"

So, assuming that the question is now settled, this man does no more investigating along that special line. This man is a mechanical scientist. Sadly deficient in common sense, he also lacks that peculiar bent of mind which impels to exhaustive researches, which creates a mental hunger for knowledge.

Let me call attention now to a class of people in most respects the opposites of the man I have been describing. Knowing nothing of current scientific methods and terms, not consciously making observations or experiments, they still seem to grasp the salient points of experiments *happening* before their eyes; they arrive without apparent mental effort at correct conclusions, and still without seeming effort apply what they know in the everyday affairs of business and of life.

The sphere in which a man of this class moves is as circumscribed as that of the other, but I have greater hope of him in the upbuilding of a poultry science. His deficiencies are of a kind that can be supplied more easily than those of the half-baked scientist.

JOHN H. ROBINSON.

A Believer in the Hen.

This paper will begin with a confession. I was originally a total disbeliever in the hen. She was, with me, a fowl simply brought into existence to make life miserable for us poor men, and to be tolerated only because of the pleas of the gentler sex. Born with an insatiable appetite, and the most destructive of all creatures so far as relates to her beak and claws, I had thought she never should be allowed to occupy any place of consequence upon my premises. I no longer hold this view. Why?

Well, I still hold that the hen out of place is a troublesome thing. She will do an immense amount of damage out of her sphere. So I have been trying to find the hen's sphere—and we, wife and I, think we have found it. Early in the game it began to be evident to me that the hen, in proportion to her value, was more profitable than any other thing in the shape of beast or fowl upon the farm. My wife attended to that branch of the business, and does now. Keeping a record of her transactions, she was always able to show a balance on the right side. This opened my eyes gradually, and from being an opponent of the hen I began to look with favor upon her. Beginning with a few hens, by degrees we increased our flock until it outgrew the house, and then we made plans to enlarge the building. The past winter I have got out timbers for a hen house twice the size of the old one.

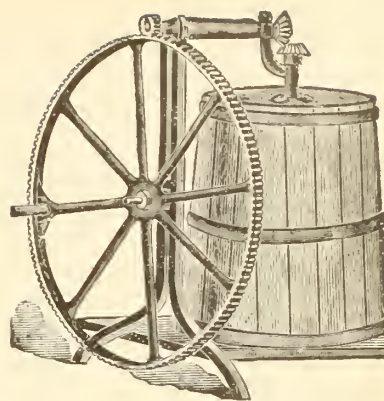
The food is all raised on the place, except the bran. In the morning the hens get a warm feed composed of bran and meal. Later in the day they are fed corn on the cob, so that they may be compelled to work for what they

get, or buckwheat or oats scattered in chaff or straw. In winter a cabbage is hung up in the house at such a height from the floor that they can only reach it by jumping. Shells are provided during confinement, and a box of dust which they greatly enjoy. By setting hens early we get pullets which begin to lay in the early winter, and keep it up while eggs bring a good price. As to breed, we have White Leghorns and Barred Plymouth Rocks.

We fence the garden with wire, and have a yard inclosed in the same way in which the hens are confined whenever occasion demands. Instead of looking upon the hen as an enemy to our peace and bodily comfort, we consider her one of our best friends.—E. L. VINCENT, in *Massachusetts Ploughman*.

Crossing.

It may pay a farmer to endeavor to improve a lot of scrub cows by using pure bred males, as it will be the best thing he can do if his capital is limited; but any farmer who will use scrub hens and begin with them as a foundation for improvement will lose a year or two by so doing, as he can get fowls or eggs of pure breeds at such small cost that it will be really extravagant to retain the scrubs. More effort has been made in improving scrub fowls than with large stock; but nothing of importance has been gained thereby. On the contrary, the use of scrubs as a foundation has retarded progress. The farmers must first get rid of the supposition that crossing breeds is an advantage. If they should judiciously cross, knowing what they are doing, they might probably accomplish something; but as it is, they do more harm by crossing than is expected. For instance, let the farmer have two breeds—Plymouth Rocks and Hamburgs. The first he finds an excellent market fowl, well up to the average as layers, hardy and adapted to nearly all climates. The Hamburgs will lay more eggs than the Plymouth Rocks (mostly in summer), but are small and hardy in winter. Now if he can combine the productive capacity of the Hamburg with the hardiness of the Plymouth Rock, the farmer considers that he will have a superb cross. He does not stop to consider that the breeders have crossed in every possible manner to get the same results, and that the pure breeds are themselves crosses that have been fixed in characteristics; nor does the farmer consider that fifty farmers in every one hundred have done just what he is about to do. So he makes his cross, and gets birds that do not lay as well as the Hamburgs, are not equal to the Plymouth Rocks in any respect, will not endure severe winters, and of all colors and sizes. Then he ceases, as he makes no careful note of the cross, neglects the birds because they become scrubs, his interest in pure breeds has passed, and he is on the down grade to ruin so far as keeping poultry for the best results are concerned.—*Farmers' Guide*.



THE QUEEN Butter Maker

THE SCIENTIFIC WONDER.

As will be seen by the illustration above, which is the latest model, the Queen Butter Maker is unlike any device that has ever been invented for churning. At the bottom of the large tub shown is a screw propeller, modeled exactly like the large screw propeller used on the large ocean steamer. The gearing of the machine allows 1,500 revolutions of this propeller in a minute, and agitates the cream a thousand times more strongly than the ordinary old-fashioned dasher churn. This immense agitation causes the tissues to break, and the butter is almost instantly made and gathered. From a scientific point of view, the butter must come gathered in a few minutes,—it does come, forming a beautiful granulated butter like wheat kernels at the surface.

Experts in butter making in all parts of the country do not hesitate to say that they have tested the "Queen" over and over, and pronounced it a wonder, that it is thoroughly practical, does just what is claimed for it, and that the grain of the butter is finer, and it is very easily cleaned.

Experienced canvassers state "they never saw anything sell like the 'Queen'; they make easily from \$4 to \$100 a week, without a bit of trouble." A widow lady, Mrs. Byers, in Mississippi, with three children to care for, who had never sold anything before, states, "she made \$7.50 a day in addition to taking care of her family."

FRIEND HIATT TALKS OF THE "QUEEN."

May 12, '97.

Dear Friend:—I received thine of the 23rd inst., a short time ago, stating that the Butter Makers would be sent that week, and I presume they are on the road now, but I felt just like writing a few lines to thee recommending the Queen Butter Maker. We have tested it with different temperatures of cream, and the butter comes so quickly, as if by magic, and besides so easy turned. It has no equal, and is going like wildfire throughout the country in these parts. At one test, butter came in 23 minutes, and at another time 3 minutes; and at another time my wife started the Butter Maker as a team was leaving the yard with a load of wood, and before it was 40 rods away the churning was done. I will have nothing to do when my dozen Queen Butter Makers arrive only to deliver them—they sell right at the door, and send in another order which will be either 25 or 50. Although I have not been idle during this delay, I am a farmer and can find plenty of work to do. I remain as ever, thy friend and agent,

Z. J. HIATT, Emporia, Kas.

ON THE HOTEL STEPS.

CHAS. H. HOUGHTALING, of Laurens, N. Y., writes: "I put in the cream at 64 degrees, and took the 'Queen' out on the hotel steps, and it was cold and snowed. I had a good crowd; I told them to take out their watches so I would not fool them. I commenced slow and got butter in five minutes, and you never saw a lot of men taken back as they were."

FIFTY-EIGHT SECONDS.

The best time I made in making butter was in 58 seconds, temperature was 64 degrees, cream was ripe, thick and sour. A grandson of mine, six years of age, made butter in one minute and a quarter from one gallon of cream; temperature and quality of cream same as above named.

J. E. DREISBACH, Carthage, Mo.

ONE MINUTE.

The "Queen" is a success. Mr. Paine says he would not take twenty dollars for it if he could not get another. The butter has come three times in one minute; usually in two minutes, or two and a half. Once it was five minutes, which was the longest time. We churn over eleven pounds a week; churn three times a week. Mrs. S. C. PAINE, Orwell, O.

BUTTER SO QUICK.

I received my Butter Maker all right, and am well pleased with it. I would buy one every year before I would do without it. We have topped the hour and a half churning, and now make butter in from two to five minutes. The boys say they have but one objection to it, and that is it makes butter so quick they don't get to run it long enough.

Dr. W. G. P. SHARP, Wartrace, Tenn.

Any Farm-Poultry readers who may desire a "Queen" for their own use, or who may want to make money selling them, should write to the QUEEN BUTTER MAKER CO., 126 E. 3rd St., Cincinnati, Ohio, for terms and illustrated price list. Agents are making money—some as high as \$500 a month.



Mountain View Poultry Farm
ELMIRA, N. Y.

(Eighty Acres Range).

White Wyandottes.

exclusively. At Onondaga, won silver cup for best display. At Kingston, gold class, special; \$10 in gold for best display. Eggs from choice matings, \$3 per 13; \$5 per 25. Specially prepared cut clover, 50 lbs. \$1; 10 lbs. \$1.25.

W. T. CAMPBELL.

\$100. \$100.

Union Special.

It may have its equal,
but its superior
is not made.

Union Cycle Mfg. Co.

239 Columbus Avenue,
BOSTON, MASS.

Send for catalogue.

Mental Impressions.

In your issue of May 15th, 1897, is a communication from Mr. John H. Robinson, entitled, "Mental Impressions and Contamination." In this communication Mr. Robinson attempts to review an article from my pen running in the *Poultry Monthly*. Inasmuch as at this writing the article has not been published in full, the review, or whatever it is to be called, seems to me to be premature. Would it not be well to ascertain first what a writer has to say before attempting to refute his arguments, and to ascertain what his conclusions are before denying them? When the article is completed, and the argument fully developed, if Mr. Robinson is then of a contrary mind from the writer, I shall have no objection to his dissecting the whole matter. Until then simple fairness would seem to demand that he should bide his time. I pass, as unworthy of notice, certain insinuations contained in this communication, believing that the article I have written, will, as a whole, justify itself to every fair minded man.

H. S. BABCOCK.

[There's ingratitude for you! Mr. Babcock began the publication of his article in February. For four months I waited for him to begin to develop his argument—then, finding that the fourth article, like the first, consisted of other people's tales and thoughts, adorned with quotation marks, strung on sentences composed by Mr. Babcock, and all sandwiched between the word, "copyrighted," and the phrase, "To be continued," I called attention to the great waste of energy, and suggested how it might be turned to account.

What are my rewards?

First: He accuses me of attempting to refute his arguments. As all must know, he presented no arguments. Yet after making such an accusation as this, he has the assurance to say in concluding, "I pass as unworthy of notice, certain insinuations."

Second: He suggests that it is highly improper to criticize before his article is completed.

I looked for such an objection as this, and it would have been a pleasure to me to be able to anticipate his wishes regarding his article.

I should surely have withheld comment had I not known that Mr. Babcock belongs to a school of writers, the length of whose productions is governed by other considerations than the amount of matter pertinent to the subject and the ability of the writer. Knowing as I did that humanly speaking it was impossible to say, or even to conjecture when the article would be completed, I felt that in basing my comments on the four installments which had been made public, I was doing the writer no injustice.

To withhold judgment on an article until it is finished, is for most of us as impossible as to avoid forming an estimate of the character of a man until his life is completed. I cannot help thinking that had the tone of my criticism been laudatory, there would have been no suggestion that judgment ought to be suspended until the article was complete.

JOHN H. ROBINSON.]

"Eggs and Fertility vs. Manure and Fertility."

Mr. Editor:—In the issue of April 1st is an article headed, "Eggs and Fertility vs. Manure and Fertility," that is so far wrong that I looked in your mid-monthly issue to see the writer who found the figures therein "truly interesting," dispel the illusion.

Granting that one hundred hens will lay one ton of eggs a year, the value of their fertilizing constituents would be \$7.78, rather than \$9.52 for the cost, as quoted by experiment station bulletins is, potash $4\frac{1}{2}$ and 5 cents per pound, according to source, instead of $7\frac{1}{2}$ cents; and phosphoric acid is 6 cents per pound instead of 12 $\frac{1}{2}$ cents.

The value of hen manure, as given by *The Feather*, is wonderful. The editor or writer must be trying to boom the business. Why, if one hundred hens would lay a ton of eggs worth at 17 $\frac{1}{2}$ cents per dozen, \$262.50, eight eggs per pound as they compute it, and did make 6,500 pounds of manure, "counting half the time, the night only," we hen men could beat the fertilizer manufacturers at their own game. I find that one hen requires $3\frac{1}{2}$ ounces of grain per day, which would be about 8,030 pounds for one hundred per year, and that is the finding of the Cornell

experiment station. The computed value of the manure of one hen for one year, fed a highly nitrogenous ration, to be 14 cents, or \$14 for one hundred.

The Maine experiment station could only compute 4,300 pounds of manure from one hundred hens, which would be worth about \$14, computed on the analysis of the manure at market price of plant food. I'm sorry to have to cut the manure product from \$70.56 to \$14, but the facts, (so far as ascertained), demand it. Why the fertilizing value of the food consumed would be less than \$60, and that a highly nitrogenous ration.

How is it possible for the hens to produce \$262.50 of eggs and void \$70.56 worth of manure?

So, according to tabulated data, the fertility added to the farm by the manure above that sold in the eggs is approximately \$6 instead of \$18.76, as Dr. Woods found it based on the figures of these other writers.

Inasmuch as I don't believe FARM-POULTRY wants to be a party to such figuring, I submit this statement.

Also, Mr. Editor, when a man takes so much delight as the doctor has in taking exceptions to your advice in two instances, lately, I think it high time somebody called him to account. He better stick to his "hobby." Isn't it a grave blunder for a doctor to be so misled by what a hen can produce? A ton of eggs and three and a quarter tons of manure, from one hundred hens, counting only half time on manure!

Isn't a doctor supposed to know about food—how much the animal system requires to keep in normal health—how much to produce (in this case eggs), and how much it would void? In regard to the price he figures his potash and phosphoric acid worth, I'm not so much surprised, because doctors are intimately associated with apothecaries, and so a matter of thirty or one hundred per cent above wholesale price would not seem so far out of the way to him.

He can blame *The Feather*, it deserves it; but he mustn't think FARM-POULTRY readers will find such figures "truly interesting." He better stick to FARM-POULTRY, and leave *The Feather* alone, as he must now see any kind of a wind blows it about.

Woburn, Mass.

F. L. MARION.

Thoroughbreds vs. Mongrels.

Mr. Editor:—I keep only about twelve fowls, but my fancy is thoroughbreds. My neighbor has mongrels. Last July, after through hatching, I sold my hens for one dollar and twenty-five cents each, and sold all the eggs I could get from five Spanish hens at one dollar per sitting. My neighbor kept his hens a month or so later than I did, and then ate them.

I don't think he beats me much. He killed his mongrel cockerels in the fall and ate them, while I sold some of mine for a reasonable price. His pullets began laying in the fall (Thanksgiving) and so did mine, but neither of us can laugh at each other, for both his and mine have more than shelled out the eggs. We both take the best of care of our stock.

Since December 11th I got two hundred and fifty eggs. January 23d I bought six Brown Leghorn pullets and two White Leghorns (single comb) making my stock twelve in all. A nearby farmer had about fifty nice Leghorn pullets just ready to lay, but they have gone back on him. This morning I went to see him, and how I did pity his fowls. The hen house was a miserable affair, with a big puddle of mud in the center. Five or six fowls stood with their mouths open, making a wheezing noise as if choking. The throat and mouth of one was so full that it almost choked. I advised him to kill and bury the bad one. He has not been getting eggs for a long time, while mine have been laying right along. I believe in good houses and scratching sheds.

E. N. J.

Lowell, Mass.

An Omaha man has an egg he claims he has kept for ten years. It must be a decade egg, of course.—*Exchange*.

Surprising: "I, sir, when I was your age, went to roost with the hens, and got up with the lark." "You did? Did you keep the lark in the same coop with the hens and yourself?"—*Nocket*.

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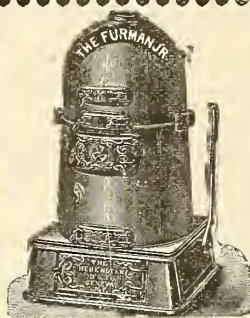
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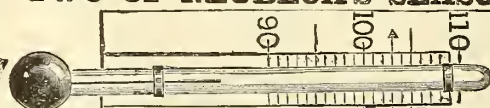
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A Poultry Sermon.

Mr. Editor:—In 1833 eggs sold the first of February for thirty cents per dozen; this season, the same month, eggs sold for sixteen cents, and at the present time are worth the large sum of ten cents per dozen. I know of quite a number in the poultry business who have not cleared twenty-five cents per hen the past year over and above the feed bill, and still the poultry papers go right on telling what lots of money there is in poultry keeping. There is money in it. There is just what people put in when they build poultry houses, and no more. In blue times out of ten a man might just as well throw his money in the fire as build poultry houses. With lice, roup, cholera, hawks and foxes to contend with, and eggs only ten cents per dozen, don't *don't* advise people to keep poultry.

SUBSCRIBER.

There is no question but this writer voices the sentiments of many; yet against the discouraging outlook presented may be set the statement of those who have not sold, and do not sell eggs at any such price. If one was obliged to judge an industry by the failures, a sorry task would be set; but, fortunately, there are successes everywhere, and what one man or woman can do, another may by the exercise of the same detailed care and methods.

Never should an industry be measured by the failures. Poultry keeping is no exception to any other business. It must pass through the same conditions as control elsewhere. There can be no exception here, and therefore the same exacting conditions must be observed. Hard times, low prices and sharp competition are the universal rule. We paid sixty to eighty cents for corn when eggs sold in February for thirty cents per dozen; today it can be bought for one-half. Cost of production has been materially reduced, but this furnishes only a partial recompense for the loss.

After thirty years experience in poultry keeping, and a close study of the problem all the while, we are free to confess that only the primary department has been mastered. What we know about this business is so much less than the great field unexplored, that we seek continually for more light, and find it here and there in the experience of others. For years the *Farmer* has attempted to prepare its readers for what was to, and has, come, and urged such a line of work and investigation as would enable individuals to retain mastery of the situation.

Poultry growing has increased with wonderful rapidity in the west, as prophesied, and today the markets of the east are flooded by carloads of eggs and poultry. This seriously affects the price of all goods put on the market in the ordinary way, and to some extent the finer grades. It is the latter field which has been emphasized again and again, for it is here the eastern farmer has an advantage. There must be a more thorough searching after the hen built for heavy production at lowest possible cost, not of food, but of nervous energy; and with this a sharper study of the great problem of feeding. Beyond all these comes the larger half of the question hinging on the manner of putting up and delivery of the product to the consumer, or through as few hands as possible.

There must come a regular and systematic form of delivery before buyers will distinguish between "choice" and "fairly good." For one, we do not believe with our subscriber, that the days of profitable poultry culture are gone—but that the days of exacting requirements are here there can be no question. He who has his dollars invested in comfortable yet inexpensive houses, stock selected by type rather than rigid breed standards, and who seeks for the best egg ration in quality as well as quantity, will find that he is able to master one-half of the great question—while, to the other half (the selling) the same skill, intelligence, forethought and energy must continually be given. Lice, roup and cholera are all to be charged to neglect or careless methods; hawks and foxes are stubborn foes, to be sharply guarded against. If our subscriber knows of any business which has no hindrance or hurt, where milk and honey flow continually and profits come easily, the fact has but to be announced for a grand rush to follow. Believing, yes, knowing, that men and women in Maine realized a good profit from their poultry in 1896, the *Farmer* must continue to urge the industry, never forgetting that the standards of an exacting present can never be lost sight of, and that a return to the easier conditions of "the good old days," is impossible.—*Maine Farmer*.

Prices Sixty Years Ago.

B. C. Lupton, of Ohio, writing for the *National Stockman and Farmer*, gives the following in regard to prices of poultry products sixty odd years ago.

"Eggs sold in 1837 for 6½c. per dozen; in '39 for 8 to 10c. In '40 they were worth only 4c. per dozen; and in '41 a cent more. * * *

"In 1831 two chickens were sold for 16c., or 8c. each. In '34 one turkey brought 50c.; in '38 one turkey 75c.; and in '42 turkeys were sold at 5c. per lb."

Moistening Eggs Under Hens.

We have recently received a number of inquiries from subscribers who are having poor hatches, and wish to know if they were due to insufficient moisture. As all of the inquiries come from low latitudes, our answer is that the poor hatches were probably due to lack of vitality in the chicks. The cases where a vigorous chick cannot get out of the shell because of insufficient moisture, when hens are used, are extremely rare, even in very dry climates, and we doubt whether such cases ever occur in low latitudes.

Circulars Received.

A. HOLMES, Cuyler, N. Y.
H. W. BROWN, St. Paul, Minn.
J. W. ANDREWS, Dighton, Mass.
A. W. MCALLUM, Sibley, Iowa.
T. H. HARRIS & Co., Berne, Ind.
GEO. A. HURLBERT, Cuyler, N. Y.
PINE TREE FARM, D. A. Mount, Jamesburg, N. J.
LEWIS ROESCH, Nurseryman, Fredonia, N. Y.
JOHN A. FRANCISCO, Ferguson, St. Louis Co., Mo.
BROOKSIDE POULTRY YARDS, Nelson, Tioga Co., Pa.
CHARLES D. PIERCE, 585 Thirty-third St., Oakland, Calif.
HILL-TOP GAME PRESERVE, Lake Hill, Ulster Co., N. Y.
FORDHOOK KENNELS, W. Atlee Burpee & Co., Philadelphia, Pa.
BROOKSIDE POULTRY FARM, J. E. Stevenson, Columbus, N. J.
VALLEY VIEW POULTRY FARM, C. H. Trask, Middlebury, Conn.
MAPLE VIEW POULTRY FARM, W. T. Greene, Hopkinton, N. H.
HOOVER'S LICE FORMULA, F. L. Hooper, Station D., Baltimore, Md.
GLOBE INCUBATORS AND BROODERS, Shoemaker Incubator Co., Freeport, Ill.
BAY VIEW POULTRY FARM, Charles E. Marshall, Rowley, Essex Co., Mass.

Good Hatching.

Mr. Editor:—I will drop you a line and report that the eggs from the yearling hens are hatching as well as last year.

After leaving the store Friday night I went to the hen house, and scooped out one hundred and sixty-five chickens from one hundred and eighty-three eggs. Only eighteen failed to hatch.

I have six hundred chicks and thirty-four more hens on deck.

Have managed to hatch ninety-two per cent fertile eggs, and ninety-three per cent of all eggs set were fertile.

I am building four more small hen houses, and if eggs only net eleven cents I know that six of it is profit.

New Salisbury, N. H.

F. H. D.

MARKET REVIEW.

Eggs.—The egg market is quiet and steady, with free arrivals, and sales of best western made at 10½@10¾c., with fresh eastern selling at 11@11½c., in small lots. The stock in cold storage is increasing rapidly, amounting now to \$1,307 cases, against 67,101 at the same time last year.

Poultry.—Trade in poultry is quiet, with the supply liberal. Northern and eastern chickens are scarce, and bring good prices, selling at 15@18c. for choice, with fowls quoted at 10@13c. Western poultry continues to arrive in large quantities, and quotations are easy, western turkeys selling at 10@13c.; frozen chickens, 8@9c.; geese, 9@10c.; ducks, 10@12c.

Real spring chickens are selling at 25@30c. Spring ducks are arriving at 20 @ 25c.

Pertinent Questions.

Why Will a Woman Throw Away Her Good Looks and Comfort?



Why will a woman drag out a sickly, half-hearted existence and miss three-quarters of the joy of living, when she has health almost within her grasp? If she does not value her good looks, does she not value her comfort?

Why, my sister, will you suffer that dull pain in the small of your back, those bearing-down, dragging sensations in the loins, that terrible fullness in the lower bowel, caused by constipation proceeding from the womb lying over and pressing on the rectum? Do you know that these are signs of displacement, and that you will never be well while that lasts?

What a woman needs who is thus affected is to strengthen the ligaments so they will keep her organs in place. There

is nothing better for this purpose than Lydia E. Pinkham's Vegetable Compound. The great volume of testimony which is constantly rolling in, proves that the Compound is constantly curing thousands of just such cases.

The following letter from Mrs. Marlow is only one of many thousands which Mrs. Pinkham has received this year from those she has relieved—surely such testimony is convincing:

"My trouble commenced after the birth of my last child. I did not know what was the matter with me. My husband went to our family physician and described my symptoms, and he said I had displacement and falling of the womb. He sent me some medicine, but it did little good. I let it go on about two years, and every time I did any hard work my womb would come down. Finally a lady friend advised me to try Lydia E. Pinkham's Vegetable Compound, which I did. The first bottle helped me so much, I continued to take it right along. My back was almost the same as no back. I could not lift scarcely any weight. My life was just a drag to me. To-day I am well of my womb trouble, and have a good, strong back, thanks to Mrs. Pinkham's Vegetable Compound."—MRS. L. MARLOW, Milford, Ill.

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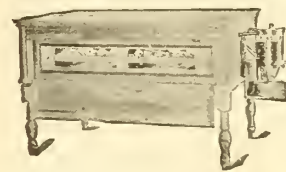
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FARM-POULTRY

Semi-Monthly.

PUBLISHED

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BY

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A. F. HUNTER, } Editors.
M. K. BOYER, }

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EDITORIAL.

The Editor is in Europe.

The editor of FARM-POULTRY is going to Europe this summer; in fact, he expects to be in London by the time these lines are read by F.-P. readers.

The trip is the carrying out of a plan which has been under consideration for two or three years, it being the intention of the writer to study some phases of the poultry problem in England and France, in the expectation of getting needed light upon those problems here in America. He expects to spend about three months in Europe, and Mr. John H. Robinson will be "acting editor" during that time.

A Japanese Poultry Paper.

The cut on our front cover is a reproduction of one which recently appeared in the *Tokyo Poultry Magazine*. Mr. Simpei Sato, the editor of the magazine, has kindly furnished us this translation of the explanation of the cut:

Raven Black Long Tail.

The cut shown in the front page is the result of long sort and most uttiring experiment by the skilled Japanese breeder, Mr. K. Fujisawa, under the direction of Mr. Simpei Sato, the proprietor and editor of the *Tokyo Poultry Magazine* Co.

Among fancy poultry there are none so wonderful and attractive birds as the long-tail specimen of which so much has been said by both European and oriental breeders and lovers of the poultry.

Of words of praise we need not say here, especially as the specimen itself is so widely known, and describes its superiority to any other fancy birds. The color of the Long-Tail was known to be only three colors, that is, White Laced, Reddish and Pure White. The sketch from the nature here we introduce is real Raven Black with the tail only grown to three feet long, and is but eight months old.

This bird after fully developed will be the possessor of at least a ten feet long tail.

The One Thing Needful.

That FARM-POULTRY needs only to be seen to be appreciated, is amply evidenced by the voluntary "Compliments" which are published from time to time, and more abundantly witnessed by the much larger number of testimonials which never find their way into print.

"Seeing is believing," is a trite saying, and generally a true one. *Seeing is subscribing* has proved true of FARM-POULTRY in many hundreds of cases, but was never more strikingly illustrated than in this letter recently sent the editor at his home address:

Wheaton, Kans., May 13th, 1897.

Mr. A. F. Hunter, South Natick, Mass.:

Dear Sir—Please send me your FARM-POULTRY for one year. I do not know the price of it, or would remit now. By chance I picked up three or four pages of one of them, but could find your address only in one place, and that was in your poultry ad.

I am somewhat interested in poultry, and from what little reading your paper or piece of paper furnished me, I think it just the one I am looking for. If you are not satisfied to send me the paper this way, please send me your price and I will remit. I know of no one who takes it, or I could ascertain in that way. Very truly yours,

D. PHILLIPS.

Although FARM-POULTRY easily ranks first, both in circulation and in influence, of the poultry papers of the country, there are many thousands of people who need our paper who do not even know of the existence of such a publication, and many thousands more who may have seen the name in the advertising columns of some other paper, but have never, even by the chance finding of a few pages of F.-P., had an opportunity to test its quality. How to get sample copies into the hands of all these people is a problem which continually confronts the publishers.

From the start FARM-POULTRY has been a liberal patron of the best advertising mediums. To judicious advertising much of its success is due; but though that success was unprecedented in the history of poultry publications, it has all along been plain that two very serious obstacles were retarding its progress.

Being the only thoroughly practical, up-to-date poultry paper, FARM-POULTRY occupies an unique position. Those who read our advertisement, but do not see our paper, judge F.-P., which they have not seen, by vastly inferior papers which they have seen. Having examined a number of papers of the other type and found in them a striking similarity and an equally striking absence of useful, practical information, they have become prejudiced against poultry papers as a class. A single copy will remove that prejudice, as far as FARM-POULTRY is concerned. Here lies the difficulty: as long as the prejudice exists these people will not write us for samples.

The second obstacle is found in the fact that an enormous number of those who need just such a paper as we are publishing cannot be reached through the ordinary advertising channels. These are the people who keep fowls without having a live interest in them. Because of this lack of interest they do not see our advertisements at all. It needs a copy of the paper itself to awaken interest.

In its field FARM-POULTRY is doing a great missionary work. It is the "little heaven," the influence of which gradually changes the nature of the whole lump. By teaching "how to make money with hens," it is doing more than all other agencies combined to place the poultry industry on a business basis. Its influence is taking away the reproach so long attached to an interest in fowls. Farmers are realizing more and more that by the rule—*what will pay a man's wages is a man's work*,—it is as well worth while to spend time caring for fowls as for hogs, cattle and horses. For a townsman to keep a few fowls is no longer considered the height of folly. The term, "chicken-crank" is fast becoming obsolete, because people are learning that the amateur poultryman often makes his hobby profitable.

Very many of these farmers and amateurs credit their success to the teachings of FARM-POULTRY; yet, large as the influence of the paper has been, it is only here and there that those who need it most have been reached.

We may safely say that in this land there are hundreds of thousands of farm and village homes where fowls are now kept at a loss, or at a very small profit, while with the help of

the advice and information this paper gives, a very creditable profit would result. As things are now, in this time of general business depression, this change from loss to profit, or, from small to increased profits, would often mean the difference between making both ends meet and running behind. In many homes it would mean little luxuries which otherwise could not be afforded; to some it would bring necessities for which the inmates are now suffering. Much as these small profits would mean to individuals and families, their collective value to separate communities and to the nation at large would mean infinitely more. Whatever influence will help to accomplish a widespread transfer of balances (however insignificant in themselves) from the wrong to the right side of the ledger, or to make small favorable balances larger, will in doing so help, also, to bring about that restoration of confidence and return of prosperity for which we are all praying.

Now in introducing FARM-POULTRY where it is most needed our subscribers can help us. Through them we may reach those who whether through prejudice, or indifference, do not know us. "We are advertised by our loving friends," and the most effective advertising is not the compliments we print, but those we neither see nor hear.

Every subscriber can help to extend our circulation, by giving a word here and there; by speaking of the merits of the paper to those who need it; by sending us the names of persons who should be interested in sample copies.

To those who may be disposed to do this we would say: Don't limit yourself to people in your own community. If among your friends and relatives living at a distance (whether in this country or elsewhere) are any who should be interested in a good poultry paper, send us their names and addresses. If FARM-POULTRY has helped you, and you have confidence in its teachings, tell this to your friends. This is practical

Reciprocity.

Let us help one another.

The publishers of this paper are actuated by that broadest and most rational philanthropy which seeks to help itself by helping others. The subscribers send in their dollars for value received, and because they know a good thing when they see it. The proposition made our subscribers when we ask their help in extending our circulation is simply this: Without cost to yourselves, make it possible for us to give you a still better paper.

It is generally understood that a large subscription list is a good thing for the publisher. It is equally true, though not so universally recognized, that a large subscription list is a good thing for the subscribers. This statement is peculiarly applicable to this paper. The most important factor in the success of FARM-POULTRY has been that it has always kept in close touch with the mass of its readers. It has been essentially the subscribers' paper. They have furnished the greater part of the reading matter; the editors have sorted, sifted, and prepared it for publication.

The readers of FARM-POULTRY thus constitute a mutual benefit association differing from the ordinary mutual association in that while in other associations increased membership lessens the cost without affecting the amount of the benefit, in this the cost remains fixed and the benefit is increased.

We want to place this paper in the hands of every one who needs it; we want, also, to be able to draw for new material on an ever-increasing constituency of readers, to give in our columns the best thoughts, the most suggestive ideas, the most helpful experiences of a rapidly widening circle of thoughtful, practical and successful poultrymen.

Peculiar as it may seem, it is nevertheless true that the two articles of daily consumption which have stood the test of years and maintained most uniform prices, are eggs and butter. Coarser products have fluctuated from low to high, but these two continue to claim attention at the old stand and very nearly old time rates. Down they may be today, but the year's end balances the account, and holds the average close to former years. With these facts before us there is ample reason for defending the dairy and egg industry.—*Maine Farmer*.

Of General Interest.

The June *Cosmopolitan* contained an article on poultry farming calculated to excite general interest in the pleasures and profitability to the farmer or small land owner of raising fine fowls. A description is given of the ancient and modern Egyptian methods of hatching eggs by heat, which will be found to be of great interest to the non-professional breeder.

There is now running in the *Cosmopolitan* what is probably the most important symposium ever printed: Does modern school and college education educate in the broadest and most liberal sense of the term? The editor of the *Cosmopolitan* began the series by a criticism of existing methods, and the leading educators of the world are contributing to the series. Every boy on a farm who has in mind to become an educated man, and every farmer having children to educate, will find important and valuable material for thought in this series.

Express Rates.

This clipping from the *Southern Fancier*, may interest some of our subscribers in the states mentioned:

"The rate on fancy poultry in wooden or slatted coops when shipped from any point in Georgia to any place outside of the state, is single first class; but if shipped from one point to another in the state of Georgia, the rate is double first class. If in canvas coops the rate is double first class in all cases.

The rate in Georgia is fixed by the railroad commission; the rate from Georgia to any other state is governed by the interstate laws.

There are only two other states in the south where the rate is the same as in Georgia, viz: North Carolina and Mississippi."

Of Interest to Breeders of Buff Leghorns.

A handsome illustrated catalogue has just been issued for the spring and fall of 1897, by the American Buff Leghorn Club. Send a two cent stamp to the secretary, E. P. Shepherd, Croton Falls, N. Y., and you will get a copy by return mail.

A Few Compliments.

Hits the Nail.

FARM-POULTRY seems to me to hit the nail on the head, so I have subscribed.

Flushing, L. I., N. Y.

J. D. K.

Good Enough For Him.

We are getting several poultry papers regularly, but for an up-to-date practical poultry paper FARM-POULTRY is good enough for us. That it may "live long and prosper," is our wish.

H. C. M.

Myersdale, Pa.

Met With Losses From Inexperience.

The last day of May closes the seventeenth month since I began in the poultry business. I have taken FARM-POULTRY but a few months, and would not like to keep hen house without it. If I had subscribed to FARM-POULTRY when I began I could undoubtedly have saved the subscription price several times over, as I met with many losses from inexperience.

Oakham, Mass.

A. K. R.

Cottager: "I ordered two dozen eggs yesterday, Mr. Crackers, and paid for them, but you only sent twenty." Mr. Crackers: "Wa-al, you see, four of 'em was bad, an' I knewed you wouldn't keer fer 'em."

He Told the Truth.

"I understand you were punished in school today, Thomas," said Mr. Bacon to his twelve year-old boy.

"Yes, sir," promptly replied the juvenile.

"For what?"

"For telling the truth, sir."

"Your teacher said it was for some reflection you made upon her age."

"That's the way she took it, father. You see, she drew a picture of a basket of eggs on the blackboard, and while she was out of the room I just wrote under them: 'The hen that made these eggs isn't any chicken.'"—*Yonkers Statesman*.

ANSWERS TO CORRESPONDENTS.

Questions Briefly Answered.

Any of the numbers of FARM-POULTRY referred to below will be supplied at the rate of five cents each.

LANGSHANS.—(H. R. H., Missouri): Langshans, as a rule, are very hardy.

CHESAPEAKE BAY.—(E. H. H., Illinois): The country around the Chesapeake Bay would be very desirable for poultry farming.

CRACKER CRUMBS.—(G. E. N., New York): Cracker crumbs are excellent in the mash of both fowls and chicks.

LEGHORN-COCHIN CROSS.—(A. K. R., Massachusetts): The cross of White Leghorn on White Cochins makes a good general purpose fowl.

EGG BROKE.—(C. C. S., Maryland): When hens are too fat, eggs are apt to break in them, which causes death.

BRAHMAS AND MINORCAS.—(H. L. G., Connecticut): Light Brahmas for winter eggs and roasting fowls, and Black Minorcas for summer eggs, would be good breeds.

LUMP UNDER BEAK.—(W. N. E., Arkansas): Wash the lump under the beak daily with castile soap and warm water, and when dry anoint with vaseline.

POULTRY WOMEN.—(M. L. R., Ohio): We believe it is harder to hire a thorough poultry woman than a man. All the good women are married!

SWELLING ON HEAD.—(E. S. W., Illinois): For swelling on side of head, wash daily with warm water and castile soap, and when dry anoint with vaseline.

EGG BREEDS.—(L. A. B., Maine): Either the Light Brahmas or the White Wyandottes are excellent winter layers. For summer laying especially, the White Leghorns are very good.

H-O FEED.—(W. H., Pennsylvania): In feeding H-O Food, it is not necessary to mix any other ground grain with it. It is a complete food in itself.

BLOOD CLOT.—(J. M., Massachusetts): The blood clot found in the hen may have been caused by accident. Probably some one threw a stone or stick at the hen in chasing her.

OVERSTIMULATED.—(G. E. H., New York): Excessive feeding of oats, peas, corn or cooked vegetables, will overstimulate the fowls, causing indigestion and liver troubles. Cooked vegetables must not be fed where there is a looseness of the bowels.

BROTHER AND SISTER.—(J. Y. McC., Pennsylvania): The sexes from a sitting of eggs can be mated to each other, as the cockerel is apt to be only a half-brother to most of the pullets. We do not approve of crossing father on daughter.

LANGSHAN CHICKS.—(H. R. H., Missouri): Langshan chicks are fed the same way any other breed would be fed. The first week give rolled oats, moistened with milk. After that soft feed like equal parts of bran, corn meal, rolled oats and middlings, scalded or cooked, and fed crumbly. Green food and fresh water daily.

PALE YOLKS.—(M. D. S., New Jersey): It is often the case that some hens in a flock will give pale yolked eggs, while others with the same food will have nicely colored ones. It is about on the same principle that some cows give richer milk than others, with the same feed and care.

PROLAPSE.—(W. H., Pennsylvania): The treatment for prolapse—or protrusion of the egg passage—is to wash the bowel with tepid water, and then with witch hazel; gently replace it by pushing back into the abdomen. If it comes out again continue the same treatment, giving a teaspoonful of sweet oil every morning, and avoid the feeding of irritating food.

PROBABLY CROP BOUND.—(J. H. L., Connecticut): It is not advisable to have cut clover hay on the floor of the scratching shed, unless the fowls are liberally supplied with green food. When they crave the latter, and cannot get it, they are apt to pack their crops with this dried hay, which will produce crop bound. From the description given, we believe our correspondent's birds are in that condition.

Number of Birds in a Pen.

Mr. Editor:—Your compliments to Brer Jacobs are capital. I was glad to see you refer to Mr. Wyckoff and his great success, and particularly because he obtained those results under conditions which you would most decidedly condemn, viz., flocks of fifty fowls each, two flocks to a house 12x40 feet, or less than five square feet to each fowl.

It was my original intention to plan along Mr. Wyckoff's lines, but I admit that you have rather made me feel unsafe. Isn't it a fact, however, that if the houses are kept in a perfectly (as far as possible) sanitary condition, the houses need not be so large? I had in mind to make my flocks one-half the size of Mr. Wyckoff's, simply as involving less risks from contagion. I would like your opinion as to the probability of results with houses giving five square feet per fowl, provided strict sanitary measures are carried out in each house, there being twenty-five fowls per pen.

Queens, N. Y.

A great deal depends upon what kind of fowls are kept. Mr. Wyckoff's are Leghorns, and one can keep fifty Leghorns in the same space that twenty or twenty-five Light Brahmas or Cochins can be kept in; and Mr. Wyckoff has demonstrated that he can keep fifty fowls in a flock in houses which give less than five square feet per fowl, and do it successfully. Whether you could do it would depend upon whether you had the ability of Mr. Wyckoff. Mr. Wyckoff gives brains to his business, and where he has made a remarkable success nine men out of ten would blunder and fail.

It is possible to keep fowls in flocks of twenty-five or fifty in houses which give but five square feet of house room, provided the strictest sanitary measures are observed; but you know what the old Indian said: "All men love lazy," and in the stress of work with chickens, or some pressing demand, some point in cleanliness would be neglected; vermin would get a foothold, or the vice of feather pulling, or egg eating; and then, goodbye profits.

We believe that Mr. Wyckoff would make more money per fowl with twenty-five or thirty birds in the house in which he now puts fifty. We found by actual experience that we averaged more eggs per fowl when we put twelve birds in pens twelve feet square than from fifteen birds in the same size pen. We did, not, however, get a sufficiently large increase to show that it would pay to invest the additional amount of money required to give them larger amount of room, and this would quite likely apply to Mr. Wyckoff. Twenty-five birds in the same pen would necessitate double the amount of capital invested in houses and runs to house the same amount of stock, and he might not get a sufficiently large increase of profit to pay the interest on additional capital, and the depreciation in the plant. We are quite sure, however, that there would be an appreciable increase of profit.

A Beginner's Questions.

Mr. Editor:—Being somewhat interested in the poultry business, and thinking some of going into it, I would like to ask you a few questions.

1st. Do you think that one dollar per hen can be made by selling eggs at market prices and raising enough pullets to take the place of all the yearling hens each year?

2d. What do you think a farm of thirty or forty acres, about thirty or forty miles from Boston, and near a village and railroad, would cost?

3d. What capital do you think a man would need to buy such a farm complete, build hen houses and buy about two hundred hens?

4th. Do you consider raising fancy poultry and selling sittings of eggs more profitable than raising eggs for market prices?

1st. Yes, two dollars per year, and more, can be made upon each hen kept, selling eggs at market prices and reproducing the laying stock each year. The average price of eggs here in New England and eastern New York is above twenty-five cents a dozen. A well cared for hen should lay twelve dozen of eggs in a year, which gives \$3 gross income. As it costs about \$1.25 a year to feed a fowl and feed her well, you can see that if you can handle the fowls so as to get twelve dozen of eggs a year apiece from them you will get above \$2 apiece profit from them. This profit can be materially increased by hatching and raising more chickens than just sufficient to reproduce the laying stock. Mr. Rankin has said that one can make \$40 profit a year off a hen by setting all her eggs, and raising a large quantity of chickens; but your question applies to eggs alone, and we have answered it upon that basis.

2d. A farm of thirty or forty acres will cost anywhere from \$1500 to \$15,000, or even more, many things determining its value—the condition of the farm, the condition of the buildings, location and many other considerations. We know of a farm of little over thirty acres, that has been in the market several years. Nobody wants to buy it because the buildings are in such a tumble-down condition that they would practically have to be rebuilt, which would necessitate an immediate outlay of at least \$2,000, hence, such a farm can only be considered as so much land. You express a wish for a farm near a village and near a railroad; both conditions enhance the value of a farm, and you would have to pay considerably more for one near a village and near a railroad than for one some little distance back from one, or both.

3d. The amount of capital required would depend altogether upon how expensive a farm a man bought, and how much he needed to pay out in repairing buildings, how expensive poultry buildings he built, and how expensive hens he bought. He ought to have \$4,000 capital to make a reasonably good start.

4th. Much depends upon conditions. There is no reason whatever why the selling of sittings of eggs from thoroughbred poultry (not necessarily "fancy" poultry) should not be combined with selling eggs for market purposes. For instance, the selling of eggs for hatching is confined to practically three months of the year. What would you expect to do with the eggs produced from your fowls the remaining nine months of the year? Or would you plan to have fowls that would lay only during the three months in which you sold eggs for hatching? All thoroughbred poultry raisers sell a great many eggs to market; and the most successful poultrymen, such as Mr. Wyckoff of Groton, N. Y., and Mr. Norton of Falmouth Foreside, Me., sell thousands of dozens of eggs to market during eight or nine months of the year; then in March, April and May, when the country is flooded with eggs, and prices extremely low, they market but very few, and sell the eggs for hatching purposes, or hatch and raise chickens to be sold as laying and breeding stock in the fall and winter. That can be made a very profitable business, and worked for an additional profit with the market poultry business. It costs no more to keep a good breeding hen, of thoroughbred stock, than it does to keep a common barnyard fowl for eggs, so if you keep good thoroughbred fowls you can sell their eggs for hatching during the hatching season, and sell market eggs the other nine months of the year—hence, make a double profit.

Wants an Egg Market.

Mr. Editor:—Up to this time I have had private customers enough for all my eggs, but now the bidders are doing so well I cannot dispose of them all in a day, and I would like to have you recommend me to some egg dealers who would be reliable parties for me to negotiate with, so that I can do away with the private customers, and ship all eggs right into town.

I shall have fifty or sixty eggs a day, and I should like to ship them twice a week, or certainly once a week. I find the price at one store thirty cents per dozen. Here we can get but eighteen at the most now, though this price cannot last, of course. Please tell me the names of good dealers, because I assure you these eggs will be the best the hens can do.

Whitman, Mass.

Mrs. J. H. H.

We think you will do much better to dispose of eggs to private customers than to attempt to send them to a dealer in the city, because the private customers pay an average of about ten cents per dozen more than the dealer will pay you, and that ten cents per dozen (supposing your birds lay twelve dozen eggs apiece in a year), means a difference of one dollar and twenty cents in the profit from each hen. Another difficulty in approaching a dealer is, that your supply is so small. A dealer cannot command a very large trade who has but a thirty dozen case a week; and, another thing, the quantity which you could ship to the dealer could not be calculable at the present high tide of egg production, as we pointed out in the article, "Who Gets the Profit," page 160, April 15th F.-P. It is the winter eggs that command the market for the year. By that we mean eggs in November, December and January—and it is one's ability to supply a dealer, or customers, at that season, that commands the trade of the year.

Changing Cockerel.

Mr. Editor:—In taking out a cockerel and putting in a fresh bird, how long, in your opinion, before I get chicks from this last bird?

C. M. B.

Cambridge, N. Y.

Ten days to two weeks is usually considered safe; but some breeders will tell you that the influence of the first male will be potent until the conclusion of the litter of eggs a female is then laying. To the best of our knowledge and belief no conclusive experiments upon that point have ever been tried—but for all practical purposes we think two weeks would be safe.

Curing Clover.

Mr. Editor:—How can I cut clover in the field and dry it to use in winter? Would it dry green or brown? Also tell me why the chicks from my incubator that hatched four days after the twenty-one days were stronger than those hatched on time.

Wallingford, Conn.

W. G. R.

1st. Clover is ent and enred for hay; in fact, to all intents and purposes is hay; and there is no difference between making hay for feeding to hens, and making hay for feeding to cows. We have found it best to put clover into cocks directly after it has wilted, and let it stand in the cocks about two days until it has got a good sweat; then open a little, turn quite quickly and put into the barn. Cured in this manner, the life is not burned out of it. Of course, it will be brown, since clover hay is invariably brown.

2d. We do not know. Ordinarily, the reverse is true, the chicks hatched three or four days over time being usually weak, indifferent things.

House Questions.

Mr. Editor:—1st. I have read with much interest your article in May 1st FARM-POULTRY on scratching shed house. Can you tell me how much is the cost complete of a four pen house, (four roosting pens and four pen sheds) built after your plan every way, all complete ready to put the poultry in, lumber, labor, etc.?

2d. Why not have the curtains of half-inch matched boards?

Natick, Mass.

A. T. H.

1st. We have not time to make a careful estimate of the lumber and labor required to build such a house, but a friend in a neighboring town built a ten pen-house shed house, with yards, etc., all complete, built by the day, and tells us it cost him, all in apple pie order, just about five hundred dollars. That would make a four pen house with yards, etc., complete, cost two hundred dollars, which is just about our estimate of two dollars per head for housing stock.

2d. Curtains of half-inch match boards would be a serious mistake, because the sheds ought not to be tightly closed; but there ought to be light and air through them. Curtains admit of some air circulating, and admit a great deal of light, which is a decided advantage in the few days in which the curtains have to remain closed. Then, too, the cloth curtains tacked to a simple frame are very much lighter, and much more easily handled than the board curtains would be.

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Why Do the Chickens Die?

Mr. Editor:—I have about sixty chickens in a brooder. They are four and five weeks old, and for the last week they have been dropping off. I find them dead in the brooder in the morning, and some are tottering around and will be gone in a few days. I do not have much heat in the brooder, because I think they are old enough not to need much. They are not lousy, because I keep them free from lice. The brooder is in a house on the ground. Their food consists of equal parts of Indian meal, fine feed, bran, ground oats, say one quart of each, and one pint of meat meal, one spoonful bone meal, salt, a little soda, made into a cake and baked. They have grain (cracked wheat and cracked corn) two parts of wheat to one of corn. They have cabbage and raw turnips by them all the time, and sour milk. I have given them fish worms two or three times, a few. I give them all they can eat four times a day, and they are hungry, too. Some of them look fine. They are mostly Barred P. Rocks. Ought I to take them out of the brooder, or is it the food that is the trouble? Orange, Mass. R. A. S.

There are many reasons why chickens die. Among them is overcrowding in brooders, too dry air in brooders, brooders too cold, brooders too hot, damp houses, want of grit, lured stock, the hens which produced the eggs too fat, filthy runs, sour food, and many other such causes. We cannot tell from your description which one of these, or whether it be some other; and it may be a combination of causes which makes your chickens die. One of the most frequent causes of chickens drooping and dying is want of grit. It is astonishing how little heed is paid to this great necessity, and many chickens absolutely die of indigestion, with plenty of food in their crops and gizzards, but lacking the wherewithal to grind the food.

Your food ration seems to be about right, excepting that we think your cake would be better if the meal was ground finer. Ground oats, for instance, unless ground very fine, are apt to be coarse and bulky.

Have your chickens been out doors any? We spoke in a recent number of the injurious effect of chickens being confined to a dry house and brooder. In fact, it is not an uncommon experience for chickens to go "off their legs" because kept too dry, and some poultrymen sprinkle a brooder house floor to dampen it a little in order to counteract the excessive dryness of the atmosphere.

These suggestions are merely surmises. We can give no other answer, owing to the little light we get from your letter. If you were not so positive that they were not lousy, we should suggest that that is the difficulty, and we strongly suspect that now, in spite of your claim that they are free from lice. Very few chickens are free from lice—and even if the chickens themselves are free, we have seen brooders so swarming with the red mites that no chickens could long survive their exhausting drain upon the system.

Pretty Good for Winter Chicks.

Mr. Editor:—Nov. 1st, 1896, I hatched in incubator seventy-five B. P. Rock chicks, intending them for broilers. I found no sale for them at the broiler age. They grew and thrived nicely. One of the pullets laid her first egg April 26th, when a little less than six months old. Two others commenced May 1st. The three are now laying nearly every day.

Do you consider that good laying for pullets so young? C. F. B.

Trumbull, Conn.

Had these pullets been hatched in April or May there would be nothing remarkable in their performance. It certainly is very much to the credit of their owner that he has been able to bring P. Rock pullets hatched at the beginning of a New England winter to laying maturity before the trees were in leaf in the spring. We would like to suggest to Mr. B. that he keep a dozen of these pullets by themselves for a year or more, keeping an accurate record of their product, and the receipts for it. It would be most interesting to compare such a record with one made by an equal number of spring hatched pullets.

Advice to a Beginner.

Mr. Editor:—Following the teaching of F.-P., I have bought a small place in the poultryman's paradise, known geographically as New Jersey. I accomplished the result with a small injection of cash and a large plaster of wind and mortgage; but that is as far as I can go on the lines you have laid down, and I ask more light to fit my particular case.

I will get possession May 1st, 1897, and will go to New York to work every day. I intend to ultimately keep three breeds, Lt. Brahmas, White Wyandottes and Buff Leghorns. I have no money left to build the

poultry houses. The residence is very old, and the first summer it will take all my surplus earnings to fit that and the grounds up. There is a 20x40 barn on the place, and as I will have no immediate use for a horse or cow, it seemed to me best, to buy about one hundred head of laying stock, as soon as I get possession, house them in the barn at night, and let them run during the day; then use the income from this one hundred head, to gradually build houses, and increase the stock.

If I adopt that course I could only use one breed. Which breed shall it be? Is it best to start with Buff Leghorns for summer eggs, and add the White Wyandottes in the fall; or start with White Wyandottes, and add the other two when I can build proper houses and yards?

Whichever breed is adopted to start with, had I better buy hens hatched April or May, 1896, or late fall pullets of 1896? If the hens are preferable, how long should I keep them? Both would have to be carried through the moult in 1897, and it seems to me the late fall pullets would yield more eggs. Would it be safe to breed from them on account of their slowness in maturing?

Kindly guide me over the rocks, and state in columns of F.-P., your reasons for each course. Brooklyn, N. Y. L. R. D.

You are in a position to start, as most other successful poultrymen have started, beginning small and growing. We would certainly think it wiser for you to begin with one variety. What that variety is is of little consequence. We bought Barred Plymouth Rocks for our start, because our next door neighbor had some that he was willing to sell, and "availability" was a most important consideration. So we bought a dozen year old hens, and a few weeks afterwards bought ten scrub pullets, and that was our first winter's stock.

Your 20 x 40 barn will do admirably to house forty or fifty birds. They will give you a good start in the way of experience, also some eggs to sell next winter, and a lot of sitters for next spring. We would not house one hundred head of stock in that building, or in any other in one flock. Our method of using it for two flocks would be to divide it in halves, and keep twenty or twenty-five birds in each family. It would not be necessary for you to have yards for these flocks. You could so arrange a partition that one-half could run out one day and the other flock the other day, which would do very well for a temporary expedient.

Your question as to starting with Buff Leghorns or Wyandottes shows that you have very little knowledge of what you are going to do. We think you will get as many summer eggs from Wyandottes as Buff Leghorns; at least, we get a good egg yield from Wyandottes both summer and winter. The summer and fall prices are such that we get a good profit from those eggs; but the best profit of all comes from the November, December and January eggs; and those you will find that you will get the most of from early hatched pullets.

Whether you buy hens a year old this spring, or pullets hatched late last fall, will depend altogether upon your opportunities for buying. We doubt very much whether you could find late hatched pullets without a special search for them, and that would cost you more time and money than they are worth. The best advice which we can give you is to get onto the place, buy forty or fifty hens, and make your "start" with that number, shaping your plans subsequently according to the advice which we have so frequently given in this paper.

English Poultry Papers.

Mr. Editor:—I should be much obliged if you would favor me with the name and address of an English poultry paper. I want to get a sample, and would prefer one conducted on the same practical lines as your admirable paper. F. T. N. Denver, Colo.

There is not any practical poultry paper published in England, so far as we know. The *Feathered World*, London, and *Poultry*, London, are probably the two leading poultry papers in England, and they are strictly fancy papers. The *Stock Keeper*, London, has been a popular poultry paper, but has recently changed hands, and is to be taken out into the country. (Brandford we think), and we are wholly unable to state what its future will be.

We have heard it intimated that England was an excellent field for a practical poultry paper, that the time was ripe for it, and that a good practical poultry paper upon the lines of FARM-POULTRY would make an instant success.

Fainting Spells and Dizziness Follow La Grippe.

WE HEAR LESS ABOUT THIS DISEASE THAN FORMERLY, BUT IT IS STILL VERY PREVALENT.

From the New Era, Greensburg, Ind.

A noteworthy instance of the fallibility of even the most skillful physicians is furnished in the case of Mrs. J. E. Smith, of Greensburg, Ind.

For four years Mrs. Smith was afflicted with a nervous affection that finally left her almost completely helpless, and which the physician who first attended her said positively could not be cured. Subsequently, a number of physicians in this and other cities, declared her case to be hopeless.

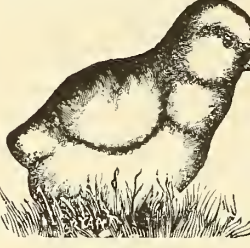
Today in spite of the verdict of the doctors, and without their aid, Mrs. Smith is perfectly well. To a *New Era* reporter she told the story of her extraordinary recovery.

"Five years ago I had a severe attack of la grippe, followed later by another. During the four years following, my health continued to decline, until finally I was hardly able to move.

"After having the grippe," said Mrs. Smith, "I was able to be about for awhile, and to do some work. But in a short time after the second attack I began to experience nervousness, and often had fainting spells, my trouble being similar to hysterics. I gradually grew worse, and in a short while I became subject to such spells of nervousness that I could do no work, being scarcely able to move about the house. I could not sleep, and could not eat. I would lie awake nights, my muscles twitching continuously. My physician called it nervousness of the throat and breast, and after treat-

ing me for several months said that my case or any case like mine positively could not be cured. Different physicians in Greensburg and other cities who attended me, agreed that my case was hopeless. For three years I lingered in misery, trying different doctors and remedies, but none did me any noticeable good. Finally my druggist advised me to try Dr. Williams' Pink Pills for Pale People, which was so highly recommended by newspapers. As a last resort I tried them, thinking that if they did me no good death might soon give me relief. The first dose helped me, and with every dose I improved. I took about three boxes and a half, and was completely cured, as you see me today, perfectly healthy and able to do all my own work."

Dr. Williams' Pink Pills contain, in a condensed form, all the elements necessary to give new life and richness to the blood, and restore shattered nerves. They are also a specific for troubles peculiar to females, such as suppressions, irregularities and all forms of weakness. They build up the blood, and restore the glow of health to pale and sallow cheeks. In men they effect a radical cure in all cases arising from mental worry, overwork or excesses of whatever nature. Pink Pills are sold in boxes (never in loose bulk) at 50 cents a box, or six boxes for \$2.50, and may be had of all druggists, or direct by mail by addressing Dr. Williams' Medicine Company, Schenectady, N. Y.



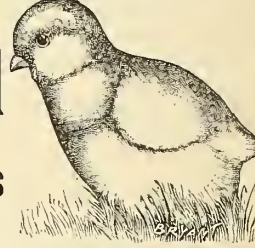
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Chick Manna

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For Little Chicks

WHEN FIRST HATCHED.



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The Food to Raise Chicks Successfully.

A trial only is needed to prove its merits. 1 lb. package 10c.; by mail 25c.; 5 lb. package 40c.; 60 lb. case, per lb. 7c. A SPECIAL OFFER.—15 lb. package \$1. Express and freight charges not prepaid.

F. P. C. **QUICK EFFECT. SURE CURE.**
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F. P. CASSEL, Lansdale, Pa.
Manufacturer of F. P. C. Preparations for Poultry, etc.



ZUCKER'S MEDICOL EGG.

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Breeders of
BARRED PLYMOUTH ROCKS, Single Comb WHITE LEGHORNS, and WHITE WYANDOTTES.

In all their pureness. Our stock are the prize winners of the country. We can supply eggs from prize stock; eggs for incubator, from crossed stock, and fresh eggs for table use.

CELERY FED BROILERS, OUR SPECIALTY.
Address orders and all correspondence to
Office, 917 F Street, Washington, D. C. **GEO. G. HARLEY, Mgr.** Hyattsville, Md.

SINGLE COMBED WHITE LEGHORNS.

Eggs One Dollar.

A chance for the remainder of season to get choice eggs from same pens used by me. Pens of prolific laying females, headed by males which have won first honors at Boston, for two seasons. Fifteen eggs a sitting.

WOODLAWN POULTRY YARDS. **CHAS. J. FOGG, Waltham, Mass.**

COBURN'S BARRED PLYM. ROCKS AND WHITE WYANDOTTES.

Eggs half price, \$1.50 per sitting. Choice yearling breeding stock for sale in lots to suit. Incubator. Eggs, \$6 per 100. Circular free.

F. A. P. COBURN, 759 Stevens St., Lowell, Mass.

The Hen is Broody.

Mr. Editor:—I have two of these Barred Plymouth Rock hens that are broody. They get on the nest, lay their egg, and remain there. If a person or chicken comes near one, she will ruffle up her feathers, and I can only call the noise she makes as a growl.

I want to set her, but "hubby" says she is not ready to sit. He says she must stop laying first. She will gather every egg in the nest under her, and spread her wings over them. Mrs. C. R. H. Cleveland, Ohio.

The hen is broody enough to set. She may lay one or more eggs after being set, but if you mark the eggs you give her, you can easily pick out those she lays.

Non-Sitting W. P. Rocks.

Mr. Editor:—Are White P. Rocks non-sitters? I have had them for two years, and last year they would not sit. This year they are still worse. I had one or two sit last year, but so far this season I have not one hen that wants to sit. I am a farmer, and do not care for fancy poultry, but would like to raise some good strong, large fowls for my own use. What breed do you think would be best? J. B. Jericho, N. Y.

White P. Rocks, as a rule, are sitters, though some strains may be practically non-sitters. If your hens are in other respects good hens and satisfactory to you, we would advise you to buy a male from stock of which the females are persistent sitters and mate with them. The writer tried this plan with some Lt. Brahmans, and found it an admirable one.

Plymouth Rocks and Wyandottes in their various sub-breeds rank highest as farm or general purpose fowls.

That Depends.

Mr. Editor:—I take the liberty to ask you a few questions which puzzle me, and ask you to help me out.

Have been taking FARM-POULTRY since the first of the year, and am more than pleased with it. In fact, await patiently, or impatiently I should say, for each succeeding number. Have derived a great deal of benefit from it, and would not be without it.

I have fifty-eight thoroughbred B. P. Rocks, hatched two weeks ago. All but five are from pullet matings, the rest cockerel mating. Now, how shall I mate them January next? Shall I put a cockerel from the pullet mating with pullets of same mating, or put cockerel of cockerel mating with pullets of pullet mating? or would it be better to introduce new blood altogether? Is it a good plan to mate pullets and cockerel from same eggs? Is it a good plan to mate pullets with a cockerel at all—pullets not less than eight months old, cockerel same? Please tell me at what age pullets should be separated from cockerels for feeding for winter laying. How is the best way to get pullets into shape for winter laying?

I have a field of alfalfa, 140 ft. by 140 ft. The 160 ft. way faces the house, and I would like to make runs that way. Now, I want to know the best way of cutting the piece into pens to get best results, at same time want to keep about the limit. How is this for a plan? (My hens will be B. P. Rocks and W. Leghorns and for laying only. Seven pens, 20x160; house, 1x14, hens 40 to 50. In an article in your paper not long ago one of the noted eastern breeders, he uses a much less size yard, and keeps fifty fowls in it.)

I hope that I am not asking too many questions, and assure you by your answering them that you will be doing me a very great favor. A. W. C. Live Oak, Sutter Co., Calif.

We infer from your letter that you are breeding for fancy points. That is what your reference to methods of mating at once suggests. If so, we can only advise to wait until the chicks are developed, and then see what you have. As you have but five birds from a cockerel mating we would think the chances of securing a good bird of either sex from that number rather slim. We would advise you to get a copy of our paper for Feb. 1st, 1896 (price five cents), and read the articles on mating Plymouth Rocks, contributed to that number by E. B. Thompson and A. C. Hawkins, two of the foremost breeders of P. Rocks.

Your plan of housing and yarding would work very well if you kept fowls and premises scrupulously clean; but we would prefer smaller flocks.

Feeding Leghorn Chicks.

Mr. Editor:—Please tell me through FARM-POULTRY what to feed Leghorn chicks. A. L. B. Dover, N. H.

For the first ten days feed rolled oats moistened with milk. Feed about every three hours.

After that make a mash of bran, corn meal, middlings, and rolled oats, equal parts by measurement. Put a teaspoonful powdered charcoal to a quart of soft food, daily. Every other day add bone meal. Feed whole wheat twice a day, and the mash three times. Supply green food daily.

Must Have Been the Weather.

Mr. Editor:—I must again ask you for some information. We have about twenty Imperial Pekin ducks that until April 10th, have been giving us eight or nine eggs a day. On that day they stopped entirely, and we have not had an egg since. To the best of my knowledge they have not had a scare of any kind. They have free run of about ten acres of land, and find lots of frogs and small crawfish. They are fed night and morning a mash and whole grain, chiefly the latter. I am at a loss to account for their having stopped laying. Can you help me? Chicago, Ill., April 26th, 1897. A. H. M.

Mr. Editor:—Will you please tell me by letter what is the matter with my Pekin ducks? They started to lay a few eggs in February, and we got four to five eggs a day for awhile. They gradually increased until they laid eight to ten for a day or two, when the number of eggs began to diminish until they laid only one egg per day. From their looks one would judge that every one of them was laying. Thinking they were too fat, I took the food away, and they were left to forage for themselves. Having free range, they wander about all day, and as far as eighty rods to a small creek. They come home and are housed every night. In the morning they are let out in a yard surrounding their house until about nine o'clock, and then let go. In February we fed them a mash of bran, shorts and turnips in the morning, and corn on the ear noon and night. In March we fed them only twice a day, with mash in the morning, and corn at night, housing them every night in a warm house. For a week we have fed them nothing, and they have stopped laying entirely. I never saw ducks looking better than they do now, or more as though they were laying.

I have some neighbors who have had about the same experience, with different treatment and feed, which puzzles me. My ducks were good layers last year. I have three incubators of one hundred egg size, and expected to run them on duck eggs, and this is my success so far. O. L. M. Crescent City, Ill., April 18th, 1897.

These two letters came to us in the same mail, and from the same state. The facts as stated in the letters seemed to indicate that the cessation of laying was due to causes beyond the control of the duck keepers. We immediately wrote to both parties suggesting a change in the weather as a possible cause, stating that if our conjecture was right the ducks would have resumed laying by the time our replies were received, and asking our correspondents to report results. From the Chicago man we received the following:

"Mr. Editor:—Thanks for yours in reference to ducks not laying. It must be as you say, due to some climatic change which we did not notice at the time. The ducks stopped laying entirely for eight days; then we got one egg; next day five; then eleven, the most they had laid in one day so far. They are now laying all right again, twelve to thirteen eggs a day. It was unfortunate their stopping when they did, as we lost several good orders for sittings through inability to supply. Chicago, Ill., Apr. 26th, 1897. A. H. M."

A Case of Carelessness.

Mr. Editor:—I think an article on putting up eggs for shipment would do some of your advertisers good, from my experience with them.

E. L. E., of —, Mass., sent me a sitting of eggs in a Costello box; eggs not protected from cold; could see them; thermometer down to twenty-five degrees when received; every egg chilled. Eggs only lacked a couple of degrees of being at the freezing point when received. It is rather provoking to pay one's money and express charges for eggs put up that way. One runs chance enough if the eggs are received O. K., to raise chicks from them. I. J. STRINGHAM.

New York City.

This is Farm-Poultry.

Mr. Editor:—Would like some information concerning English pheasants and pea fowls. Are they tender or difficult to raise? Can they be hatched and brooded by a hen? About how many eggs do they lay—and at what season? Can they be housed with hens and ducks in the winter?

Please give me some hints about their proper care and feeding. C. M. B. Harvard, Mass.

[We would like to help Mr. B., but, really, we cannot do it. Not many persons are interested in pheasants and peacocks. They are in no sense practical fowls. An article on them would hardly interest one in a thousand of our readers, and we need every inch of our space for matter of more general interest.]

BREEDERS AND MARKETMEN.

OUR REQUESTS:—We make two requests of our subscribers. One is when writing our Advertising patrons always mention FARM-POULTRY. Another is if you ask them questions, always inclose a stamp. If you observe both of these requests it will benefit you amazingly. It shows that you mean business. Remember, "Mollases will catch more flies than vinegar," and those who observe it are served first.

A BAD WICK is worse than done. Use only the Sunlight Carbon, 10 cents for sample. S. G. Robinson, printer F. P., 29 Purchase St., Boston.

A. P. ALLEN, Meadville, Pa. S. C. White Leghorns, R. C. Brown Leghorns, Silver Spangled Hamburgs, Light Brahmans, Silver Wyandottes, B. P. Rocks, Pekin Ducks. Send for circular. All eggs are \$1 per 13; \$2.50 per 40. Bronze Turkey eggs, \$1.50 per 10. You can order direct from this, and eggs will be sent as soon as possible after receipt of order.

A RARE CHANCE. To make room for my young stock will sell 3 pens of choice Barred Ply. Rocks cheap for quality of stock. For particulars address F. A. Quimby, East Rochester, N. H.

A NICE BREEDING PEN of 5 Golden Wyd'tts, \$10; returnable if not satisfactory. Eggs packed to go safely any distance, \$2 per 13; \$5 per 40 of Golden and Buff Wyandottes and White Wyandottes. Stock for sale. All farm raised. F. S. Tenney, Peterboro, N. H.

ANNABLE'S S. C. W. Leghorns. Prices reduced one-half for rest of season. This stock is too well known for further comment. Winners for '96, '97. Peabody, Sept. '96, 1st cock; 1st pullet; 2d cock; 2d hen. Peabody, Jan. '97, 1st cock; 1st, 2d, 3d hens; 3d pullet; 3d cock. Gloucester, Jan. '97, 1st cock; 1st, 2d, 3d hens; 2d pullet; 3d pullet; 2d cock; 1st hen. Eggs \$1 per 13. C. H. Annable, Danvers, Mass.

A YOUNG MAN wanted who understands killing and dressing ducks and chickens for market. Merrilbrook Farm, Box 105, Stamford, Conn.

BARRED W. P. Rocks, exclusively. Stock disposed of. Eggs from my best matings, \$1.50 for 13; \$2.50 for 26. For incubator, \$5 per 100; \$3 per 50. Mottled the golden rule. Evergreen Poultry Yds., H. J. Curtis, Red Hook on Hudson, N. Y.

B. P. ROCKS, Hawkins-Thompson strain, for rest of season \$1, 13; Dr. Kelchner, Camden, N. J.

BLACK Minorca eggs from prize stock, \$1 per 13; \$3 per 50. Geo. A. Hurlbert, Cuyler, N. Y.

BUFF, Laced and W. Wyand. Buff, Br. and W. Leg.; Buff, Br. and W. P. Rocks, Minorcas, C. I. Games, Ducks, and W. I. Games. Eggs, \$1; Games, \$2 per 13. Chr. free. Lewis C. Beatty, Washington, N. J.

BUFFLEGHORNS—Arnold and Shepherd strains, solid color. Eggs, \$1 per 13; \$2 per 30. Geo. A. Hurlbert, Cuyler, N. Y.

C. S. CULLUM, Meadville, Pa., breeder of Single Comb White Leghorns, Rose Comb Brown Leghorns, Barred P. Rocks, Bronze Turkeys and Pekin Ducks. All eggs \$1 per 13, except turkey eggs, \$1.50 per 9. Send for circular.

EGGS \$1.50 per 15. Wyck Leg., B. P. Rocks, B. Lang, great layers. Edw. M. Abbott, Brookline, Mass.

HOUDANS exclusively; finest stock. Eggs \$1 per 13, \$2 per 30. Geo. A. Hurlbert, Chittenango, N. Y.

\$1 FOR 20 EGGS; \$2 for 40. Prolific White Wyandottes, also vigorous Light Brahmans. No inbreeding. D. H. Lambert, Wilton, Conn.

PEKIN Duck eggs \$6, ca.; \$6 per 100, 50 per cent for. Ducks ave. 102 lbs. N. P. Brown, Westboro, Mass.

PEKIN DUCK eggs, \$1 per 20; \$3 per 60. Geo. A. Hurlbert, Cuyler, N. Y.

ROSE C. B. LEGHORNS, specialty 10 years. Circular free. J. L. Randolph, Bartlett, Ohio.

26 B. PLY. Rock eggs, \$1; 100 for \$3; from vigorous stock. Emanuel Scheiber, Brandywine, O.

WANTED. Two large pure white Guinea females, first class every way, price low. N. P. Brown, Westboro, Mass.

WHITE and Blk Minorcas. Eggs, \$1 per 15. First class stock. Sarah Shaw, Wintthrop, N. Y.

WHITE P. Rocks, Empire strain. Eggs from best matings, \$1 per 13; \$2 per 30; \$6 per 100. Geo. A. Hurlbert, Cuyler, N. Y.

WHITE WYANDOTTES exclusively. Brown egg strain. Fowls bred for practical purposes; eggs, \$1 per 13; incubator eggs, \$5 per 100. Stock in season. Sat. guard. P. D. White, North Attleboro, Mass.

WHITE WYANDOTTES, brown egg strain. All stock guaran. W. B. Eastman, St. Johnsbury, Vt.

WH. WYAND'S. Large, dark egg strain. Eggs, \$2 per 13; 3 sit. \$3. Rush Vaughan, Woodstock, Vt.

WHITE WYANDOTTES, large dark egg, prolific laying strain. W. E. Mack, Woodstock, Vt.

WHITE WYANDOTTES, bred for practical purposes; large size, great layers; orange yellow legs and beak; no inbreeding; fertile eggs from best matings, \$1 per 13; \$2 per 30; \$6 per 100. Geo. A. Hurlbert, Cuyler, N. Y.

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L. T. BRAHMAS and W. P. Rocks, prize winning where shown. Eggs in season. Stock for sale. F. C. Brown, Quechee, Vt.

IMPORTED White I. Games, new Buils, and standard varieties. Wyandottes, Rocks, Brahmans, Cochins, Leg's, Mu's, Andalusians, Bantams, Ducks, Turkeys. Book free. Eggs from high score prize winners, \$1, 13; \$6, 100. Davis Bros., Box K, Washington, N. D.

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BUFF COCHINS, large size, full feathered, vigorous stock, sound in color, true Cochins shape. Eggs, \$2.50 per 13; \$4 per 26. Quabog Poultry Yards, C. Ralph LeGros, Palmer, Mass.

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BUFF COCHINS. I have bred Buff Cochins exclusively for several years. Eggs from prize winning stock, \$1, 13. L. C. Butman, Rockport, Mass.

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PEKIN DUCK EGGS for sale. Rankin and Bradley Bros. stock, \$2 per 13 eggs. J. G. Broomall, Ashbourne, Pa.

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EGGS \$1 per 13. Red Caps, B. Minorcas, R. P. Rocks, L. Brahmans, P. G. Polish, Buff Cochins, S. L. and W. Wyandottes, R. and S. C. W. Leghorns, R. and S. C. Brown Leghorns. Catalogue free. P. E. Twining, Kipton, Lorain Co., Ohio.

S. L. AND WHITE Wyandottes, B. P. Rocks, Lt. Brahmans, \$1.50 per 13. Buff Pekin Bantams, \$1 per 13. Pekin Ducks, \$1 per 10; \$5 per 100; \$70 per 100. Cat. free; farm range. Evergreen Cliff Poultry Farm, Poughkeepsie, N. Y.

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13 EGGS \$1; 100, \$6. Barred and White Plymouth Rocks, White Wyandottes and Light Brahmans, Pekin Ducks. E. S. Howe, 915 Varnum Ave., Lowell, Mass.

BLACK Langshan and Bl. Minorca eggs for sitting \$1.50, 13. W. B. Towne, West Coxsack, N. Y.

75 C. per 13; \$1.25 per 10; \$5 per 100; \$5 per 100. B. P. Rocks, A. J. Abbott, Middlebury, Vt.

B. P. ROCK, W. Wyand., S. C. B. Leg., B. Min. eggs, \$1 per 13. Jas. W. Crosby, Braddock, Pa.

EGGS for hatching, for incubator use from pure bred W. P. Rocks, per 100, \$2.50. Dutchess Co. Poultry Farm. F. W. Velie, Mgr., Rhinebeck, N. Y.

75 PER CENT fertile guaran. Eggs P. Ducks, W. P. Rocks. C. A. Stevens & Co., Wilson, N. Y.

EGGS at half price, \$1 per 15, from our best matings. Buff and Barred Plymouth Rocks after June 1st. Good hatch guaranteed. J. T. Rhodes, Box 689, Leechburg, Pa.

1776 FARM, Warner, N. H. Eggs will hatch large vigorous chicks for sale. B. P. Rocks, L. Bra., W. Wy., No. 1 P. Rocks, \$1 per 13; \$1.50 per 100.

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HAVE WON prizes at all the leading shows during the past season, including Onconts, Scholarians, Rochester, (both shows), Westery, Binghamton, Washington, Amesbury and Boston, winning a majority of first prizes competed for during circuit. Also B. P. Rock winners at Amesbury show. Eggs from imported stock, \$2 per 13; \$5 per 40. Stock for sale at all times. Write for catalogue. Uriah Stafford, 393 Old Boston Road, Pawtucket, R. I.

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HOUDANS, farm raised, 1st class eggs, \$2 per 13. E. W. Holmes, 21 Cliff St., Lynn, Mass.

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THE PERFECTED Incubators. Cash, installments, or rented. The Perfected regulator fits any incubator. 4 cts. in stamps for circular. H. D. Moulton, Taunton, Mass.

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WHITE and Black Langshans. My birds have always won 1st prizes wherever exhibited. Eggs from prize Whites, \$3 per 13; \$5 per 26. Blacks, \$2 per 13; \$5 per 40. Choice stock for sale. Geo. P. Cullin, Freeport, Me.

2 POINTS in favor of buying Lord's strain of Black Langshans are, extra laying qualities, and exhibition points. A number of my best layers scored 94 and 95 points this season. I can only sell about 50 sittings of eggs from my best pens; so order early. Eggs, \$2 per 13. J. H. Lord, Box 26, Lawrence, Mass.

LEGHORNS.

R. C. B. Leghorn eggs, Forsyth-Benedict, birds scoring above 90. \$1.40 per 13. H. D. Johnson, Jr., South Bend, Ind.

BUFF Legs. Stock and eggs from birds that have always won in show rooms. Amesbury, Malden, Stoneham, Peabody, Gloucester, Boston, Mass.; Manchester, N. H.; Rochester, N. Y.; Scranton, Pa.; Hagerstown, Md. Not a bird scored less than 92. Eggs, \$1.50, 13; \$4, 90; \$8, 100. Frank Woodbury, 2d, Beverly, Mass.

MINORCAS.

DO YOU want superb exhibition and breeding Bl. Minorcas? F. H. Wood, Dryden, N. Y., has them.

BLACK MINORCAS exclusively. Cornell, N. Y. Eggs \$1.50 per 13. R. Story, 187 Arlington Ave., Brooklyn, N. Y.

300 Min's at bargain, 26 eggs for price of 13 now. Catalogue, G. H. Northrup, Racineville, N. Y.

Buying Eggs for Hatching.

Mr. Editor:—I thought some of the parties selling and those buying eggs for hatching might be interested in my experience. I bought all of my eggs last season from FARM-POULTRY advertisers at a cost of \$16 outside of the express charges. I had eggs shipped twice from each party. I bought one sitting of —, Marlboro, Mass., (Brown Leghorn eggs), and from some unaccountable reason had not one fertile egg. I wrote him, and, as his were hatching fairly well, he could not give a reason, but kindly offered to send a sitting of White Rock eggs free, which he did, and from the thirteen eggs I hatched twelve chicks, and raised eleven. They are extra good, large, strong stock with very yellow legs and skin, and I am well pleased with them. From —, of Marlboro, I got twenty-seven White Wyandottes and thirty-two Barred Rock eggs; hatched ten White Wyandottes and twenty-one Barred Rocks. From —, of Natick, I got fifteen Barred Rock eggs, thirty-two White Leghorn eggs, twenty-six Brown Leghorn, and six Brahma eggs; hatched five Barred Rock chicks, two Brahmas, five Brown Leghorns, and eight White Leghorns.

Now, Mr. Editor, I must confess that I at first thought the hatch small for the number of eggs, but in Mr. —'s case in the Leghorn, he sent me nearly as many again eggs as I paid for, and two more Rock eggs than I paid for, and I have a pair of Rocks hatched from his eggs that I would not sell for what all the eggs cost. I sold enough cockerels to friends to pay for the eggs, and have three or four well marked pullets of the P. Rocks I bought of Mr. —, of Marlboro. Of the White Wyandottes I got of him I raised only one pullet and three cockerels. One pullet died when small, the others got drowned in a sudden shower. One of the Wyandotte cockerels weighed, at seven months old, seven and one-fourth pounds. The pullet is a beauty, and weighed, at seven months old, six and one-half pounds, so I feel that I got my money's worth, as I have some good stock to start with, and might have had more as good, only for that sudden shower which drowned some of the chicks.

There is one thing I would like to say in behalf of Mr. Wyckoff. I wrote him two years ago for a cockerel, for which I paid him three dollars; express and all made him cost me over \$4, and I did not feel well pleased with him for the price. But now I have a lot of pullets of his get, and many of them are fine, and *how they do lay*. So in that case, I now feel I had my money's worth. I think too many of us are too quick to judge before the stock is mature; but of course there are frauds in the business. I have thrown away some money before this, but in many cases have got good value. I have fully concluded, however, that if you buy for fancy, the stock usually lacks in utility.

New Milford, Conn. Mrs. O. B. E.

Some Good Late Chicks.

Mr. Editor:—You will remember that you sent me some eggs last fall, though you said you did not like to do so, as the weather had been so hot you did not think the eggs would hatch well, or the chicks amount to much; but as an experiment you would let me have some at reduced rates. I was anxious to get some hardy prolific laying stock, and I love experiments, and as I have some fine birds of prize winning strains, and wanted some cockerels of another family, (not to be inbreeding, as I believe first in hardiness and utility, and *after that* in fancy points), I sent for the eggs, and I must say I am delighted with the result, as I have exactly what I want, two beautiful cockerels, one Plymouth Rock and one White Wyandotte. I don't know which is the handsomer. They are both good shape and color, and very vigorous. The Plymouth Rock is very precocious; was crowing at four months, and soon afterwards I put him and the Plymouth Rock pullet in a pen by themselves.

At five months and twenty days the pullet commenced to lay. Her first egg was quite large, and after skipping one day she laid five days in succession, all soft shelled. I then put her by herself, and the next day she laid a good egg, but no larger than an ordinary pullet's egg. Next day she laid a double egg, then skipped one day; then laid, in nine con-

secutive days, three single, two double, one single, and then three double eggs. That is, in nine days, nine eggs—or, if you count the double ones as two (which they are when the shell is removed), she laid fourteen eggs in nine days. I am not mistaken. I watched her very closely, and she was by herself. Did you ever hear of such a thing before? She has laid in all twenty-six eggs, such beautiful dark ones—then started to sit. I shall let her sit for awhile, as I was afraid she would lay herself to death. She is fed the same as my other hens, and they are not laying soft shells, or doubles.

My White Wyandotte pullets are just starting to lay. I have three White Wyandotte pullets, and two cockerels. The second cockerel is very large and white, but not so matured as the other. They were hatched the 7th of October.

Two years ago I had some large well grown pullets which were three-quarters Plymouth Rock. I put with them a fine White Leghorn cock. He was quite old; in fact I could not find out just how old he was—but as he was such a fine bird, and I could get him cheap, I took him, and trusted to the beneficial effects of Sheridan's Powder. I used it plentifully, according to directions with the can, and I never knew eggs to hatch so well. Many of my hens hatched every egg. I raised over three hundred and fifty chicks up to between four weeks to four months, selling some at broiler size, and disposing of the remainder about the first of July. The pullets were mostly white, and grew to a good size, and made fine layers. I had some of them afterwards.

I now have only thoroughbreds, White Wyandottes and Barred Plymouth Rocks. I am keeping an egg record. Shall also keep a record of the eggs from the pullets of your stock. I am raising a few chicks, and I can almost see them grow. Others complain of infertile eggs, but mine are hatching fine; and the chicks are so hardy. I hope in another year to be away from town, so I can raise all I want. I have sold eggs for hatching this year, but have done no advertising.

San Jose, Calif. Mrs. H. M. H.

Laid Twenty-Two Days in Succession.

Mr. Editor:—I have a Buff Plymouth Rock pullet which was hatched July 25th. She laid every day for twenty-two days in succession during the month of January. Can a Barred Rock beat that? G. K. Buffalo, N. Y.

BRONCHITIS. Sudden changes of the weather cause Bronchial Troubles. "Brown's Bronchial Troches" will give effective relief.

A Good Chance.

B. G. Smith, Elmira, N. Y., breeder of White Wyandottes, White Plymouth Rocks and Rose Comb White Leghorns, states he has two hundred layers of this year's breeders, to sell at low prices. Must make room for one thousand chicks. Write at once.

Poultry Book Free

Containing 140 pages of practical information on poultry raising, with one year's subscription to the *Western Poultry Review*, a 16 to 24 page paper devoted to all branches of poultry industry, only 25 cents; four months trial 10c.; sample free. Cheapest and best advertising medium. Send 25 cts. (silver) and get book and paper one year. *Western Poultry Review*, Shannon City, Iowa.

"Broilers For Profit," by M. K. Boyer, is sure to be in great demand. It is just the book those who are about to embark in the broiler business need. It gives all the details that so many similar treatises overlook, but which are so important. The chapters on running incubators and brooders are worth the price of the book to any poultryman; while those on the amount of capital, time, land, etc., required, and how to dress for market, give information which can only be obtained from such experienced men as Mr. Boyer. It is certainly the most complete work of the kind ever published. Mr. B. pictures the various situations which the amateur meets, in a very clear and concise manner, and cannot fail to be of value to every practical poultryman. The book retails for fifty cents.—*Practical Poultryman*.

Transfer of Stock.

Middle Village, New York, May 5, 1897.

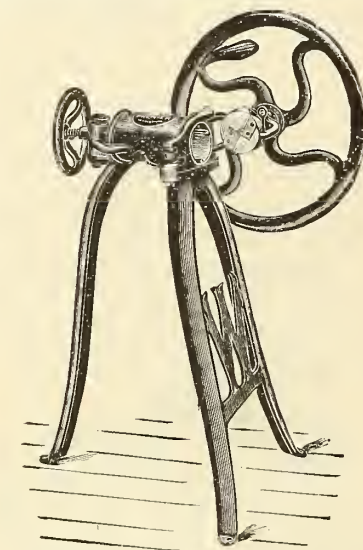
This is to certify that I have this day sold to Charles S. Powell, proprietor of Woodcleft Poultry Yards, Freeport, New York, my entire stock of "Golden Dust" Buff Cochins Bantams, without reserve, being the birds which I reserved for my own breeding purpose, and which I believe to be the best lot of Buff Cochins Bantams in America. Being personally acquainted with Mr. Powell, the proprietor of the above yards, I take great pleasure in recommending any who wish to improve their stock, or are in want of eggs, to communicate with him.

Respectfully,

RICHARD A. HOMEYER.

The New Premier Green Bone Cutter.

The great demand for a Green Bone Cutter, one that could be operated by a child or a woman, has led to the bringing out of the "Premier," manufactured by P. A. Webster, Cazenovia, N. Y. This machine is made to stand the test of cutting all bones, and will not break, two pounds per minute having been cut by hand with this machine. The machine is made of the best iron that can be made, and no expense spared in putting same together in the best workmanlike manner.

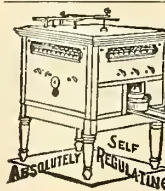


There are only a few pieces to this Bone Cutter, and what there are are heavy—no gears to get loose and wear out. The feed is the most simple yet made, and is under the operator's control at all times. To fill the machine, merely press the plug, which allows the feed screw to be drawn back; the follower always remaining in the hopper. The knives are made of the finest tool steel by the largest knife concern in the United States, tempered especially for cutting bones, and will not break, as they lay flat on the cutter head. Send for descriptive catalogue with testimonials.

HOW EVERY READER OF THIS PAPER CAN MAKE MONEY.

For several months I have noticed advertisements in different religious papers describing an improved Dish Washer. As I had grown so tired of washing the dishes the old way, I sent for information to Dep't 43 of the Iron City Dish Washer Co., Sta. A, Pittsburg, Pa., regarding their Washer. They sent me one, and I have found it to do just as they said it would. It washes and dries the dishes in less than one-half of the time it usually takes, and I never have to put my hands in the greasy dish water. My little girl, aged eight years, thinks it lots of fun to wash the dishes, and she can do it as well as myself. Several of my neighbors came in to see it work, and they all wanted one. I wrote the company, and they allowed me a commission. They also wrote and told me how to become their agent. I am now making \$40 a week, and still attend to my housework. The Dish Washer sells everywhere. I show it, and that makes the work easy. I understand they still want a few good agents, and anyone desiring to make money easy should write them.

A CONSTANT READER.



INCUBATORS

The OLENTANGY Incubator has proved to be the best. Have taken prize after prize. Brooders only \$5.00. Before buying elsewhere, send for free description and testimonials. Also breeder of 40 varieties of high-class poultry. 110 yards, 110 houses. Address G. S. SINGER, Cardington, O.

PET STOCK.

RAISE Belgian Hares for market. More profit than cows. Arthur W. Kirk, Forestgrove, Pa.

PHEASANTS.

MONGOLIAN and English pheasant egg. Easily raised as chicks. J. H. Graves, Chillicothe, Ky.
ENGLISH PHEASANTS. Eggs, \$3 per doz. Wm. H. May, Jr., 9 Daniels Ave., Pittsfield, Mass.

PIGEONS.

JACOBIANS and Homing pigeons at \$1 and \$2 per pair. L. C. Bowman, Timberville, Va.

RUNT PIGEONS, the best to cross for market squabs. Large stock, largest birds, lowest prices. Write. J. E. Morse, Wrentham, Mass.

H. C. WACK, West Conshohocken, Pa. Speedy and reliable Homers, young \$1 pair. Stamp for reply.

HOMERS for flying purposes, that are second to none. Homers for squabs, large, vigorous, handsome. Also the only practical Mason paper published. Prices and birds a bargain. Add, with stamp, Thos. Wright, 142 Riverside Ave., Medford, Mass.

PLYMOUTH ROCKS.

HAWKINS and Lambert B. P. Rocks, good size. Br. eggs, 75c. per 13. Paul W. Noyes, Mystic, Ct.

BARRED PLYMOUTH ROCKS, Hawkins and Thompson strains. Eggs for hatching, \$1.50 per 13. Jno. L. Watson, Portsmouth, Va.

B. PLYM. Rocks bred for layers. Eggs \$1 a sit. M. Anderson, 966 Lawrence St., Lowell, Mass.

BUFF P. ROCKS. Brown eggs, prolific layers. Hardy, good sitters and mothers. No dark pin feathers. Mrs. A. L. Powers, Leominster, Mass.

WHITE P. ROCKS. Will sell fine yearling stock cheap. Write for prices. Eggs, 15¢; \$1; \$2; \$2.50; \$3. Wm. F. Hinds, DeRuyter, N. Y.

PLY. ROCK book finely illustrated, 15c. W. W. Clogg, Melway, Mass., Publisher.

KENOZA LAKE Poultry Yards. Barred P. Rocks only. Bradley Bros. strain. Will sell my breeding stock, including all my high scoring females. Write for price. W. B. Davis, Haverhill, Mass.

1776 FARM, Warner, N. H. Large vig's B. P. Rocks, Hawkins, Bradley Bros. Lambert's prolific brown egg str. Eggs, \$1 per 15; \$4.50 per 100.

POULTRY CURES.

SOFT SHELL Eggs. Streeter's Remedy, sure cure at once. Price 25c. D. A. Streeter, Waterbury, Ct.

POULTRY FARMS.

FOR SALE. The Sunnyside Poultry Farm comprising all buildings necessary for raising poultry on a large scale. Four lots, total 200 ft. front, 200 ft. depth. 100 fruit trees on the premises. Apply to Mrs. R. A. Worle, Nazareth, Pa.

POULTRY SUPPLIES.

ISSELL Lee Lice Killer. Breed Barred Plymouth Rock poultry. 15 eggs, \$1.25. Geo. W. Swett, West Hollis, Me.

PRINTING.

STRICTLY first class stock and work. See ad, 2d cover. Reporter Printing House, Wellsville, N. Y.

RHODE ISLAND REDS.

FOR BEAUTY and utility choose R. I. Reds. Eggs \$1 per 13. A. E. Cummings, Hudson, N. H.

SPANISH.

WHITE FACED Black Spanish. Eggs, \$2 per 13. Mrs. Chas. B. Smith, New London, Ct.

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A POULTRYMAN with many years experience, and competent to take entire charge wants position. Has first class references. Address, Poultryman, 24 Greenwich St., New York, N. Y.

WYANDOTTES.

W. E. MACK, dark egg strain White Wyand., \$1 sitting. Wm. C. Raymond, Bridgewater, Vt.

BUFF WY. eggs, \$2 per 13; prize winn'g str. W. S. Palmer, 4957 Rubican Ave., Germantown, Pa.

WHITE Wyandottes exclusively, early layers brown eggs, fowls bred for eggs and poultry. Eggs \$1 per 13; for incu. \$5 per 100. Stock in season. Sat. guar'd. A. M. Jerauld, No. Attleboro, Mass.

Eggs from practical, not inbred W. Wy. \$1.50 per 13. F. H. Tuttle, Manlius, N. Y.

WHITE Wyand., farm raised dark egg strain eggs, \$2 sit. E. M. Holmes, 21 Cliff St., Lynn, Mass.

WHITE Wyandotte eggs from large vigorous stock bred for practical purposes, \$1.50 per 13; \$2.50 per 26. Also chicks from the same stock, 25c. each. C. E. Gilbert, Stevenson, Conn.

WHITE Wyand. exclusively. Farm range. Eggs, \$1, 13; \$5, 100. C. H. Trask, Middlebury, Ct.

WHITE Wyand. exclu. Storm King eggs from special matings \$1 for 13; incub. eggs \$6 per 100. Clover Hill Yds. C. H. Hardy, Groveland, Mass.

WHITE Wyandotte eggs at half price (\$1 per 13) for rest of season. Now is the time to buy eggs from good stock cheap. Also a few females at \$1.50 each, and 2 males at \$2 each. Send for circular. J. W. Andrews, Dighton, Mass.

WHITE WYANDOTTES. Practical fowls, egg producers, farm range. Eggs, \$1. J. H. Fleming, Dunellen, N. J.

WYANDOTTES. Gold, Silver, White, Buff. Eggs, \$1. Choice young stock after Sept. 1st. Violante Laced Wyandottes. No eggs. Stock after Oct. Sylvan Grove Poultry Farm, Bernardston, Mass.

WHITE Wyandottes. Felt strain, stock direct from breeding. Price reduced, New York and Boston. Reduced price for rest of season. Eggs from best pens, \$1 per 13; 3 sittings \$2.50. Satisfaction guaranteed. Circular free. A. Holmes, Cuyler, N. Y.

"Competition Paralyzers."

The "Woodcleft" strain of

COCHIN BANTAMS.

Buff, Whites, Blacks and Partridge, of the correct size and color, and of the true Cochins type, acknowledged by the best judges to be the leading strain. Having purchased from Richard A. Homeyer his entire stock of "Golden Dust" Buff Cochins Bantams, we now own and control the two greatest strains on earth.

Winners Always at the Greatest Shows, Live Stock Show, New York; Madison Square Garden, Washington, Boston, Philadelphia, Worcester, Plainfield, Charleston, Camden, Baltimore, and Mineola, N. Y. Can spare a few eggs at \$8 per sitting.

WOODCLEFT POULTRY YARDS, Freeport, New York.

A Case of Liver Disease.

Mr. Editor:—Following your advice I started on the poultry business on a small scale a few weeks ago, but so far have not had excellent success. I purchased from a sappy house in New York city a pen of White Wyandottes. The five pullets were to be layers, and the male a cock. Here is three days record: First day, three eggs; second day, three eggs; third day, one sick pullet and one egg. After three thorough applications of Lambert's D. to L. I find my flock still as lousy as a tramp. I kept the sick pullet in the house the night I discovered her dirty on the steps, and gave her a dose of castor oil. I had her kept moving all next day, except when she went to the nest. She would sit there for a long time, and then get off disgusted. I concluded she was egg bound. I kept her in the house the next night, and made a few pills of boiled milk and bran, charcoal and castor oil, and after cutting away the foul feathers from around the vent and thoroughly syringing her out, I gave her a pill and put her to bed. The following day when she was laid down among the others, the cock beat her severely, and all the other pullets joined in, and were it not for the timely intervention of my wife they would have picked her eyes out. However, she died that night, after being paralyzed in the legs for several hours. Post mortem examination showed the vent only slightly swollen inside, the heart good, no excessive fat, the liver about twice normal size and turned white at upper end, gall bursted, gizzard all right and healthy looking, crop full of good grit and corn, also an abundance of green food. Her comb and wattles were red until an hour before death. The oviduct contained about three full fledged eggs, crowded so as to be flat and hard as if boiled.

Another of the pullets is dirty behind, and I fear a second loss. If you can determine from the foregoing where the trouble lies and suggest a remedy, please do so.

Tenady, N. J.

W. O. E.

[The pullet evidently died of hypertrophy of the liver, which is enlargement of the liver, and is caused by not sufficient exercise, absence of green food, and more particularly exposure to heat. As that diseased condition of the liver takes a considerable time to develop, the pullet was evidently in an advanced state of the disease when you bought her. This, however, could not be determined by a casual examination, because to all external appearances the bird was in good health—and you say her comb was red up to within a few hours of her death. We doubt if you could have successfully doctored her for the trouble, even if you had known what it was. In such a case, as in most others, prevention is ten times better than cure. The pullet which you say is becoming soiled behind, should be given a teaspoonful of castor oil, and given plenty of range and plenty of green food, with very plain diet for awhile, and should be made to exercise by having to scratch and dig for her food. We have no great faith in drugs in such a case, and we think it very probable that the bird's constitution is so impaired that she never will be good for anything, even if you can bring her out of the trouble. Poultrymen who have had much experience in doctoring fowls are coming to pretty much believe that the sick hen is better dead and out of the way than bothered with.

You will do well to read the article on "Diseases of the Liver," on page 24, August 1st, 1896, FARM-POULTRY.—ED.]

Mongrel Fanciers.

Mr. Editor:—I suppose space is too precious for idle words, but I should like to find room for a few words on mongrel fanciers. That there are such, Fanny Field's article on Bucks County breed convinces me. I never see mongrel fowls or eggs advertised, but presume the fancier wants them himself. Of her interesting letters received, one eared nothing for looks. He surely has an eye for the beauties of this world! I presume a frizzly fowl with no tail and a comb with one spike would be fully as acceptable as a prize winner—both having the same utility qualities.

Another was glad they were not in the Standard. By and bye, wanting a change of blood, perhaps, he may be looking round for Bucks County breeders. If everyone thinks

as he does—kept them out of the Standard, etc.—well, perhaps he'll find some. A third wanted them before their good qualities were improved out of them. Perhaps he's had experience, and perhaps he knows no better. There is an improved Bucks County—that is a fowl having all their good qualities, but its plumage is solid buff. It is a fowl of good size, hardy and quiet; a prolific layer of large brown eggs, and a fine winter layer. Having no black feathers, of course no dark pin feathers, and dresses off a nice yellow table fowl. The Standard calls them Buff Plymouth Rock, and calls for solid buff. We think their being buff instead of promiscuously strewn with black makes no difference to their good qualities. I have bred mongrels, though not a fancier of such, tasted of the small breeds and both varieties of Plymouth Rocks. Have now found my ideal, and believe there is no fowl that can beat them. They have not been forced; but if Fanny Field had them what a record would be shown on that forcing "from the cradle to the grave." A. L. P.

Buff Plymouth Rocks.

Mr. Editor:—Our mating of Buff Plymouth Rocks has proved rather disastrous with us, having just taken out seven chicks, most of which have more or less down on their legs and toes. Now what I want to find out is which side of the house this comes from.

I suspect it comes from the male side, from a Cochin ancestor several generations back, as he comes from a strain of Buff Rocks noted for their size. I have no reason to believe him impure in blood, as he comes from stock direct from one of the most noted breeders of the above variety in the country; only I think he tends to breed back to some feathered legged ancestor. The pullets he is mated to are from eggs purchased of one of the originators of the breed. I don't think these pullets have any Cochin in their make up. Neither cockerel nor pullets have the least trace of feathers on their shanks or toes. We have no feathered legged male on or near the place, having nothing but Single Comb Buff and White Leghorns previous to last spring, when we added the Buff Rocks to our list.

This we did more for hatching purposes, as we always have trouble in the spring to get broody hens, having to scour the country over for them—and when we do get them we generally get the lice with them gratis.

Now the above experience with a new breed does not discourage us, nor cause us to sour on the breed or breeder who furnished us stock. We have long since learned to expect such results from well established strains of older breeds and varieties.

We expect, by careful mating and selection, to establish a strain of Buff Rocks from our present stock that will be a credit to us as well as to parties from whom we purchased our stock to start with.

The Buff Rocks, to our mind, are worthy of all the care and attention that can be bestowed upon them. In our short experience we have learned that they are very hardy, feather fast, and come to laying maturity very nearly as soon as the Leghorns. In fact, we had Leghorns hatched at the same time with the Rocks that did not begin laying with the latter; but these were exceptions rather than the rule.

As layers, we have found them about equal to the Leghorns, up to date, as we are keeping a record of them. H. C. M.

Myersdale, Pa.

[There seems to be no doubt about a feathered legged ancestor, and we believe it to be the Rhode Island Red, as some of that breed come with feathers on their legs.—ED.]

Good Laying.

Mr. Editor:—I have five Plymouth Rocks and six Light Brahmas. During the month of March I got exactly one hundred and fifty eggs. Two pullets had kerosene put under their wings which stopped their laying for about two and a half weeks. Another met with an accident which tore the skin for about four inches over each hip. She laid perhaps every fourth day. Another hen was too fat, and laid about every third day. All things considered, don't you think my pullets did well?

Cleveland, Ohio.

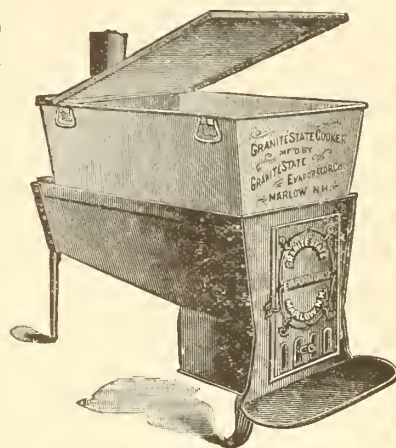
Mrs. C. R. H.

[Yes.—ED.]

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WATER HEATER

Only 36 inches high. Weight, only 150 lbs.

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The Boiler is made of galvanized steel, a sheet metal that will not rust or corrode, nor require painting. It is furnished with four iron drop handles for convenience in lifting from furnace, and a tight-fitting galvanized steel cover.

Guaranteed just as represented in the illustration or money will be refunded. Hundreds sold. No complaints.

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ONE DOLLAR SENT TO-DAY

WILL GIVE YOU THE IMMEDIATE
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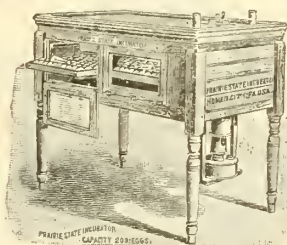
HOW TO ORDER:

Send \$1.00, stating whether you wish a 25 gallon or 50 gallon boiler, and we will forward by freight a GRANITE STATE Cooker made after our latest model and warranted to be manufactured from the best of steel and iron. You can pay the rest, \$12 if 25-gallon, and \$18 if 50-gallon is ordered, at the rate of only \$2 per month. This very low price is made for the sole purpose of introducing our goods into your town-ship. You can thus get the BEST COOKER EVER MADE for less than 7 cents a day! On account of this liberal offer, you are to furnish us with the names of two town officers as references. Ask any bank about us or write to the publisher of this paper. Circulars and valuable book, "Cooking Food for Stock," absolutely FREE. When you write mention this paper.

JUD'S BRIDGE, Conn.
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GENTLEMEN:—The 50-gal. Cooker I ordered from you was received Dec. 30, O.K. I used it on the 4th for scalding hogs, and scalded one weighing 523 lbs., and had plenty of water. I should recommend the 50-gallon size for farmers' use. I can heat 50 gallons of water in 30 minutes from the time I start the fire in the furnace; it is the best boiler I have ever seen for heating water or cooking feed for hogs and poultry. Yours very truly,
CHARLES H. HARTWELL.

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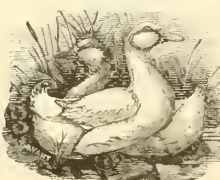
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Imported by us direct from the Langshan District, China, were accepted by the United States Government as the

"CORRECT TYPICAL STRAIN."

Our Langshans stand preeminent as the foundation stock of about all the noted yards of Langshans in America to-day. 442 first and second prizes, gold and silver medals, cups and specials awarded us. Write for illustrated 1897 catalogue.



CHAS. F. NEWMAN,
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Stock and Eggs

of my always prize winning Imperial Pekin Ducks and Toulouse Geese, Blk Minorcas, Black Langshans, Light Brahmas, White Wyandottes, White Guinea Fowl, Barred and White Pl. Rocks, S. C. White and Brown Leghorns, White Holland Turkeys and Plt Games.
Send stamp for circular and answer.

Fowl Hints.

The Mississippi Hen.

In a Mississippi lowland,
Far from busy haunts of men,
On a nest behind a barnyard
Sat a Mississippi hen.

Hidden snugly in a thicket,
She had done her level best
To warm to life a lot of things
She'd gathered in that nest.

Five round stones, a piece of corn-cob,
Broken door knob, wooden stick,
One small lump of hardened putty,
And a fragment of a brick.

On all these for weeks she'd brooded,
In the sunshine and the rain,
And had warned off all intruders
In a manner most profane.

With a grim determination
She would ultimately hatch
From the aggregation something
Not a hen on earth could match.

But one day the mighty river
Burst its bounds. In terror then
Fled the dwellers in the lowlands,
All absconded—save the hen.

Creeping swiftly came the waters,
Naught their onward course could balk;
Round the grim old hen they gathered,
She defied them with a squawk.

Danless hen! She met the onset
With a scream of fierce delight,
Pecked, and snarled, and swore, and scuffled,
Screed and scratched with all her might.

Then the swiftly rushing torrent
Swept her, squawking from her nest,
And in the darkened west the sun
Sank gloomily to rest.

But the river hasn't conquered;
Roosting in a tree, that hen
High above her nest waits grimly
For the flood to fall again.

When she'll simply take her station
On those stones and sticks once more,
And will hatch out, if it's possible,
A big department store.

—Chicago Tribune.

Mean Trick on a Hen.

It is by the aid of the marvellous X-ray, at which no one longer marvels, that the poultryman on a large scale is enabled to ascertain unerringly the productive capacity of his fowls. It was Rudolph Spreckels of California, son of the sugar king, to whom this novel idea must be credited. He is the owner of a vast poultry farm, on which ten thousand gaudy chickens and cackling hens scratch and seek the early worm. The hen that does not lay eggs does not perpetuate her species, hence she is not commercially valuable, being fit only for the pot or the broiler, and that is an end to her usefulness and her money-making qualities. But the hen that lays—she is indeed a joy for years.

On a ranch of ten thousand hens two thousand of the birds may be classed as of the non-producing class. Hence it occurred to Mr. Spreckels that if the drones were eliminated from his flock the cost of the maintenance of the whole would be materially reduced. A nest to nest surveillance was impossible. The unprofitable hen might live in idleness and luxury undetected for an indefinite period. Mr. Spreckels had read of the location of vagrant bullets, stray buttons and elusive fish bones in the human frame by means of the radiograph. Why not cause the hen to give up its secrets? Two experts in the use of the Roentgen rays were called in. They stated that they believed they would be able to differentiate the layers from the non-layers. By way of experiment a half dozen chickens were selected from the ranch and placed before a fluorescent screen. Of these the first four were found to contain eggs. The other two appeared to be barren. The proof of the finding was in the killing of the hens. The X-rays had revealed truly. The next day hens of known reputation—both good and bad—were selected, and the results shown by the radiographs were verified by post-mortem examination.

As a result, an X-ray plant was established at the Spreckels ranch, and the work of examining the ten thousand hens was commenced. About thirty hens each hour can be submitted to this rigid examination. There has been a glut in the dressed poultry market of San Francisco in consequence of the untimely end of such hens as were found not to be earning their oats.—New York Journal.

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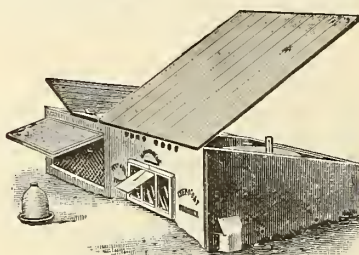
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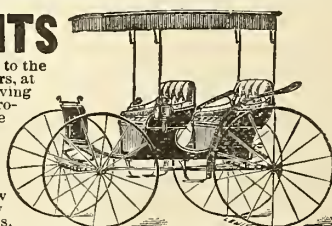
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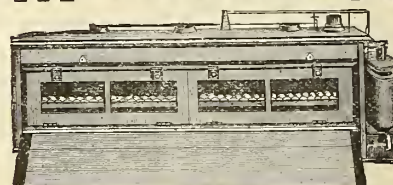
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